Introductory Address

DELIVERED AT THE OPENING OF

ST. BARTHOLOMEW'S HOSPITAL MEDICAL SCHOOL,

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NOT long ago, a gentleman, who was about to deliver a course of lectures for the first time, expressed to a friend the difficulty he felt concerning the introductory lecture. He had prepared, he said, all the others very well, but he did not know what to talk of in the first one as an introduction to the course. "Oh!" replied his more experienced friend, "anything will do for that." "But," it was urged, "there is just my difficulty. When the subject is prescribed for me I have only to treat it to the best of my ability; but now I am embarrassed by my range of choice." "Well, don't give yourself too much trouble," was the cynical rejoinder, "for they wont expect anything in an introductory lecture. They know very well that it is only a preface to work."

There is no doubt some truth, and much mischief, in this. If one have nothing to say, it is wisest to hold one's tongue, even though there be no preface—if an introductory lecture be given at all, it should be for some good and useful purpose. And therefore I sympathise now with my friend in the embarrassment he felt. However reassuring it may be to be told that nothing is expected of you, having ventured to ask your attention for an hour, I am anxious to avoid, so far as I am able, waste of your time.

Yet let me confess that my sense of the responsibility of the task I have undertaken to-day is lessened by the reflection that, after all, nothing I can say is likely to be of much avail in influencing the future career of any one of those whom I now have the opportunity of addressing. Even if I possessed the power of producing for the moment a deep impression, still I know that impression would in almost every instance very soon become effaced. Here and there, indeed, a great and lasting influence might be wrought by good words wisely spoken, and no doubt it is worth while to waste many in the hope of planting some; but I cannot expect even such exceptional success as this. No. The influences which have hitherto operated, and which will continue to move you, must be more potent and abiding than words, though spoken with an authority to which I can lay no claim, or with a force which I cannot command. The remembrance of a well-known voice may sometimes check the commission of an unworthy act, but our characters are not so readily moulded, our destiny is not so easily or abruptly changed. And I am sure you will be relieved to hear that I do not purpose to spend the time allotted to me in giving you good advice. But I will forthwith assume—nay, I verily believe, that you have come hither with a genuine desire to learn, with an honest resolution to study.

But let me say a few words upon the subject of your future work—Medicine, employing this word now in an inclusive sense.

Whatever position Medicine is entitled to hold amongst the sciences, this is certain—it is not an exact science; and I venture to think that much of the great interest, aye, of the charm of its study depends upon the kind of evidence with which it has to deal. I believe that if you obtain clear and definite ideas of the relation of Medicine to other sciences, you will work at it more intelligently; and while you will avoid, on the one hand, exaggerating the power of your art, you will, on the other, know best how to vindicate the just claims of your profession.

It may be said that there are essentially two kinds of evidence.

That which is, in its nature, conclusive or absolutely certain, and which can leave no doubt on any reasonable mind. Thus there is the direct evidence of our senses. Here the only source of fallacy would be in our senses themselves. So, again, evidence, which is called mathematical, by which any fact or truth is demonstrated beyond all question.

Then there is that which is, in its nature, probable. Probable evidence is of the widest possible extent, and varies infinitely in degree, from evidence of the most doubtful kind possible up to evidence so probable that for all intents and purposes it becomes conclusive. Thus, as an illustration of different degrees of it, our belief is stronger—that is, the probability is greater, that July will be warmer than January, than that any particular day or week of either month will be wet or fine, or that at any given period the wind will blow in a particular direction.

Probable evidence is the common every-day evidence with which we are constantly concerned, the evidence upon which we are continually acting. Nay, if we did not depend upon it, our very existence, so long as it lasted, would be most wretched. We take our food in peace and comfort, not because we absolutely know, to a mathematical certainty, that it will not poison us, but because the probability is so great otherwise that it amounts to what is called a moral certainty. We breathe freely, and without thought or care, not because we can be absolutely sure, but because we are convinced, that the air contains nothing that will materially hurt us. The risks we run in such cases as these are, practically speaking, of no moment; but observe that, after all, our sense of security depends only on extreme probability. And when the importance of the issue at stake is less, we are content to run much greater risks; we are willing to depend on much lower degrees of probability. Even more than this: in order to accomplish some end, or to gratify some desire, we often voluntarily expose ourselves in various ways to considerable risks, providing only, so long as we are rational, for a fair proportion of probability in our favour. Thus when we go to a distance for duty or pleasure, we place ourselves at ease on the railway without fear, or, I suppose as the rule as yet, previous insurance, although we are by no means sure that we shall reach our destination sound and unshaken. But we expect to do so.

This great question of probability is at the root of the difficulty of realising the uncertainty of life. It is almost in vain that the truth is continually sounding in our ears, that expressions of it are ever on our tongues. We admit the fact, but do not accept it. While we are in health we know that the probability is that we shall live, and we proceed accordingly. We know not what a day may bring forth; yet who but the most wretched and the worst lies down at night without plans for the morrow?

Much of this evidence, when in its strongest form, we are wont, I say, to regard as absolutely certain; but it is important nevertheless to bear in mind that it is not actually so. For instance, we assume it as certain that no living person will attain to an age very far in excess of the ordinary limits of human life—say of a hundred and fifty or two hundred years. But although this is in the highest degree probable, yet it cannot be said to be absolutely certain. For ordinary purposes every one is satisfied with degrees of probability below this. The tables and business of insurance offices represent very fairly the practical value of different degrees of probability for the ordinary affairs of life.

Now out of the fact that probable evidence varies almost infinitely in degree, some important considerations arise.

There is the different influence which the same evidence will produce on different minds. Different men are very differently affected by evidence. The amount of evidence by which men are convinced, the degree of probability upon which they will act, varies as their characters. This is commonly expressed in some of our most familiar phrases. It is said of this man that he is easily convinced; of that one that he is very cautious, and so on. In fact there are all means between the extremes of the weakest credulity and the most stupid scepticism.

Then comes the credibility of testimony. The same witness will be believed or not according to the probability of the fact to which he testifies. If a man whom you know little or nothing of tells you of some event, the occurrence of which you would regard as highly probable, you accept his statement without hesitation; whereas if he spoke of some occurrence which you regarded as extremely improbable, you would reasonably doubt the accuracy of what he stated. But you would justly attach weight to his testimony in proportion as you knew him, by past experience or otherwise, to be trustworthy, a man of capacity, and so on.

Thus when strange statements are submitted to us, and we have no means of investigating the question for ourselves, we balance in our minds what we conclude is the improbability of the alleged fact, on the one hand, against the character and authority by which it is supported on the other. Now this, of course, involves and largely concerns our own capacity for judging of the nature of the event. Cullen observes: "Neither

the acutest genius nor the soundest judgment will avail in judging of a particular science in regard to which they have not been exercised." He adds: "I have been obliged to please my patients sometimes with reasons, and I have found that any will pass, even with able divines and acute lawyers." Thus it is with homœopathy, because, as it was once happily said in reply to the assertion that every man had a right to an opinion, the right to express an opinion does not of necessity imply that the capacity exists to form one. All men, it has been remarked, are as the vulgar in what they do not understand.

The value of evidence which is not in its nature conclusive is almost always relative. When we are told of something new and strange, we try it by other previously ascertained and well-established facts; and whatever may be its fate with us if it be not opposed to these, we cannot accept it if it cannot be reconciled to them. These are the chief grounds upon which we reject the doctrine of spontaneous combustion of the human body; for it is, as Liebig has admirably shown, in direct opposition to unquestionable truths.

Thus, too, in this way we can best answer those who are apt to get very angry with us if we do not listen to the wonders to which they testify—to tales of spirits which rap, or of tables which turn, or of globules which cure, for instance. We do not merely say that their gross improbability far outweighs the testimony which is offered in their favour, but that they are impossible because they are opposed to incontrovertible facts.

Now observe, Medicine is not an exact science. It is concerned with probable truths.

Our business is to minister to the cure of disease, to the repair of injury, and so to prolong life, and to render it as useful and as agreeable as possible—to prevent or remove or mitigate the ills that flesh is heir to. We are therefore immediately concerned with the nature and treatment of disease.

But the nature of disease for the most part is often during life, and sometimes after death, doubtful. The diagnosis of a particular case, or the determination of the disease which exists, is very often only more or less probable. Indeed it perhaps seldom happens that one can be absolutely certain beforehand, beyond all doubt or question, of the nature of the disease which actually exists, although we may in the great majority of cases, from the weight of probable evidence, make our diagnosis a moral certainty, and therefore amply sufficient for all practical purposes.

So the treatment of disease is for the most part doubtful, for the remedies we employ are in their action more or less uncertain. Some are very equivocal, others almost sure; but, on the whole, when skilfully prescribed, it is highly probable that many of them will act in the way anticipated.

I cannot think less of Medicine as a study because it is not an exact science. On the contrary, if it were, it would, for me at least, lose much of its present interest. We are very often told that Medicine is, at the best, an uncertain science, obscure in its principles, and doubtful in its practice. Difficult enough we know; but is the reproach of its difficulties to fall on those who have to grapple with them? Uncertain! Granted that, for the most part, we have to do with probabilities only—nay, sometimes, it may be, with mere conjecture. But who does not every day of his life depend on probabilities and act upon conjecture? Probability, as Butler says, is the very guide of life. In Medicine, as in the daily occurrences of life, probabilities vary from moral certainties to possible contingencies.

It seems hardly reasonable when for disease or pain the aid of Medicine is sought to complain that the means employed for relief or cure are rather uncertain in their action, or somewhat doubtfully selected; that, after all, recovery cannot be secured, but is, by the aid of Medicine, only rendered highly, or at least more probable than before. I say it seems hardly reasonable to urge this objection when every day and all day long we stake our very lives, nay, what we cherish more and hold dearer than our lives, upon probabilities—when the most momentous issues in the world are fearlessly and confidently based upon probabilities. But it may be said that the question of probability is a very wide one, from almost absolute certainty to the merest chance. But in this regard I contend that the art of Medicine, in the hands of a skilful practitioner, stands well; and, moreover, while unfortunately it often happens that the prospect of being able to do much good is very doubtful, it fortunately very seldom happens that we need run much risk of doing mischief.

But, again, out of this arise many interesting and some important considerations.

Doctors differ—because they are men and have to do with probable evidence. I do not think you will call upon me for illustrations of this.

Although it is not difficult to express to others, who have not been educated on the subject, any conclusion or opinion we may have formed on the nature of a case, it is often by no means easy to explain to them the grounds upon which such opinion is based. Thus courts of law are too often not courts of justice in regard to medical evidence, nor, I think, can they be so long as their business is conducted as at present.

Quackery greedily feeds upon our doubts and differences; but on this subject there is time now only to remark that its prevalence is a proof how little the difficulties and requirements of the healing art are appreciated by those who have not studied it.

The uncertainty of Medicine is too often employed as a shelter for ignorance. The plea is often urged, by those who know very little about it, for not knowing more. They affect to doubt what they will not be at the pains to investigate.

But considerations more important than these press on us.

It is because Medicine is not an exact science that the man of observation and experience in the practice of his art has so enormous an advantage over others, and why it is that he knows so much more than he can teach; for although he cannot arrange his knowledge into aphorisms, or induce general principles from his collection of facts, he can apply it with skill to the investigation and conduct of individual cases. He has learnt how to hit; he can only teach you how to aim. Professional skill cannot be transmitted from one to another. It can be gained only in one way and in one place—by work at the bedside. Let me put this before you in the words of one of the great masters and teachers of Medicine, who worked and taught in this hospital—aye, and who teaches still, for his spirit and example animate his pupils now. "In entering this place," says Dr. Latham, "even this vast hospital, where there is many a significant, many a wonderful thing, you shall take me along with you and I will be your guide. But it is by your own eyes, and your ears, and your own minds, and (I may add) by your own hearts, that you must observe, and learn and profit. I can only point to the objects, and say little else than 'See here, and see there.'"

But then this word "experience" is very loosely employed. Much is called experience which deserves a very different title. Experience is not to be confounded with opportunity. It comes of the use which has been made of the opportunity. "This word in its strict sense," says Whately, "applies to what has occurred within a person's own knowledge." We must be very sure about the knowledge we assume.

Much, very much useful knowledge, we may, however, acquire from others, although its value will bear no comparison with what we work out for ourselves. But then we have this advantage, that testimony or teaching may be accepted conditionally until tried by our own experience. In the reception of facts upon the testimony of others we are influenced by the authority upon which it is supported. Facts, of course, vary in their weight, and in proportion to this should the evidence upon which they rest be ample and secure. Still more critically should the evidence of a fact be examined if it is to be the foundation of an important conclusion. Facts must be honestly collected and thoroughly established before any attempt is made to induce from them general principles.

But there is mischief in the other direction. I allude to rashness in experimenting in ignorance or disregard of evidence already existing. The present period of our professional history is remarkable for the many novelties which are being continually proposed and practised in the treatment of disease and injury. One is almost bewildered by the multitude of new plans and schemes which are being daily brought before his notice. Have you seen this?—have you tried that? are questions perpetually put to us. What are you to do? One thing is clear. You cannot try everything which is proposed, even if you had nothing else to think of. But if you do not you are told you can know nothing about it, and are wantonly missing a grand opportunity of advancing a splendid plan of treatment. You attempt to reason on the subject, and to apply to it the test of general principles. But you are answered that these are all very well in their way, but not conclusively established, and that the only means in this stage of progress of determining the value of the novel scheme is to try it. Now against this dogma I am anxious to protest. If time were illimitable, and human beings nothing better than frogs, the course thus urged upon you might be a plausible one. But as it is impracticable, from want of time, to try everything, even if you were so disposed, you are compelled to choose between what you deem worthy of examination or experimental investigation and the rest. And I contend that we are not justified in the practice of any measure—unless it be upon ourselves—in which

there is not reasonable probability of doing good, or at least ample security against the risk of doing mischief. But how are you to tell that till you try? Why you must use your judgment, which has been educated for the purpose, in the matter. Your knowledge, strengthened by your previous experience, must be your guide in enabling you to decide what to attempt and what to decline. Surely never was there greater need than now, in these days of sensation, of what has been called "dry light."

There is, of course, the opposite extreme of growing jealous of any disturbance of our ideas, which, like wine, are apt to be cherished according to their age, and so of becoming unduly prejudiced against what is likely to upset them. But we are most prone to begin life with the first error, and to end it, if it become long enough, with the last. This is due, amongst other causes, no doubt partly to temperament, but partly, I suppose, to the fact that as we get older there grows up in us a gradually increasing distrust of novelties, because it has been our fate to witness the premature collapse of the great majority of those which, for a time, were fashionable. Wise and honest men will avoid either of these extremes, like skilful pilots, steering safely between the rocks.

This shows the necessity, not only of as much professional knowledge as can be acquired, but of the most careful mental training.

Some of the legislators on the all-important subject of education seem to think that its sole purpose is the acquisition of knowledge. With much complacency they lay it down that this is to be studied, and that is not; that so much of this is to be learnt, and the rest need not be attempted; that this is useful and that is not, according to their own ideas of the application of knowledge to what they call practical purposes. These practical men do not appear to see that the mere acquisition of knowledge is, perhaps, the lowest use of education. They do not appear to recognise any higher purpose. Why the word itself forcibly proclaims its great design, that it is to be the means by which the intellect is led out or trained and cultivated. Just as well might it be said that the sole advantage we derive from the years we have lived is experience of worldly affairs, and take no heed of the moral discipline which is the priceless legacy of past hopes and fears, joys and sorrows, regrets and resolves, and the cares which cling to us as the very shadows of our minds; as well might we ignore all this influence as to regard education only in the sense of so much information acquired, and take no account of the culture of the intellect, which is its final purpose, and should be its chief aim.

Everyone will recognise a twofold purpose in education, but while the acquisition of knowledge is everywhere insisted on, the culture of the mind has attracted little attention. The one is anxiously inquired into, the other practically ignored. What we learn and know is important enough. What we are or may become is far more important still.

Let me ask your attention then for a few moments to the influence of education from this point of view.

The mind—understanding by that the sum of the intellectual faculties simply—is the function of the brain. Whatever opinions may be entertained respecting the relation of mind to brain, it seems to me that we are not only justified, but reasonably compelled, to regard the intellectual powers, or the mind as expressing their sum, as the function of the brain. At all events, express it as you will, the relation of function to structure is the same here as elsewhere, and subject to the same laws. There is the same dependence of one upon the other; the same effects are produced by rest and exercise—exercise here, as elsewhere, is essential to health and strength. And here, as elsewhere, we have to inquire what kind of exercise is best. Are our muscles better worth cultivating than our brains?

When a man is in training for some athletic performance all this is carefully considered. It is not merely that he is made strong and active and enduring, but these qualities are developed in a definite direction, according to the task before him. He exercises especially this or that particular set of muscles, to run, or pull, or fight. But if the purpose were, not the performance of some particular feat, but the due and equal development of every part, the training must be directed accordingly—strong muscles must not be neglected, but especial attention must be given to the weak ones, the aim being the perfection of physical strength and vigour.

Now, the brain can be trained like the muscles, and will answer to the call in a similar manner. There is overwhelming evidence of this. See what comes of especial training in one particular direction.

Have you ever watched, for instance, an experienced clerk casting up accounts? Why, the sum is told before there appears to have been time even to glance at the figures. This comes of practice; but if it were not such a matter of common observation, the world would stare and call it genius. But look where you will, you find quite as strong, though not perhaps to a superficial view such striking, illustration of the same result. Do you think that the constant study of complex problems brings no facility of solution? Do you doubt that the judgment is strengthened by its use? Do you deny that the imagination is heightened by exertion?

Men differ by nature in mind as in body. But I submit that mental, like manual, work depends more upon education than original conformation. Hands differ; but works of art are the result rather of acquired skill than of natural dexterity. Brains differ; but natural ability, however great, must be well trained in order to do good work.

Now for the practical application of this.

If a man's future occupation in life is one which will make an especial demand upon a particular faculty, no doubt the best way of preparing for that pursuit will be by the especial exercise of that faculty. Indeed, as he pursues his occupation the particular faculty in demand will become developed by exercise beyond the others. Thus practice makes perfect. He, therefore, succeeds best in what he has to do who yields to the demand and embraces every opportunity of cultivating this or that particular power. Thus it may be the cultivation of the memory, or of the imagination, or of the judgment, or simply of observation till it becomes most rapid and accurate, or the power of abstraction in spite of disturbing influences, the power of concentrating for a time the attention upon any single subject to the exclusion of all others.

And thus, gentlemen, we should train ourselves for the duties of our profession. What is the nature and extent of the demand which it makes upon us? Observe that it is distinguished as an intellectual pursuit by this: that while it makes no excessive demand upon any one faculty in particular, it calls for a due and almost equal cultivation of them all.

I could hardly name any faculty which, for the purposes of our profession, should be prominent beyond the rest. I am sure I could not name one the due force of which could be well spared. Therefore I submit that the education which will best adapt us for the duties of the profession is one which will train and develop fairly and harmoniously all the faculties of the mind—one in which especial care is bestowed upon the culture of those which appear to be deficient. Not to assume, *for example*, that where the memory appears bad there is a want of it; but to use the deficiency only as a hint to exercise the memory especially, until at least it reaches to a fair level. In such training, also, all extravagances should be duly repressed. All tendency to exaggeration in observation or laxity in deduction should be avoided. We especially should be on our guard against the development of all mental eccentricities. Shortly it may be said that the aim should be rather to remove defects than to cultivate excellences. While natural tastes are not to be repressed, all distastes are to be overcome.

And herein lies, I think, the great advantage of Medicine as an intellectual pursuit. It at once demands and gives full scope and opportunity for the cultivation of many and various faculties of the mind, and involves the neglect of none. It would be difficult to conceive a more healthy intellectual training than a professional education fairly carried out. For surely it is most desirable to possess, as far as possible, an evenly-balanced, well-proportioned mind—one in which the faculties are thoroughly developed and harmoniously adjusted, no one being unduly above or below the rest; where the mental eye, to borrow a happy figure, is achromatic. A mind, otherwise weak, but with some one faculty extraordinarily developed, may accomplish great intellectual feats which may evoke the admiration or command the gratitude of men, just as a monstrous limb or muscle may accomplish feats of strength which astonish the multitude and make the achievement famous. But in either case there is really deformity—not the perfection of nature.

I suppose there is no such thing as an altogether healthy, perfect, and complete mind. As the Country Parson says, we are all, more or less, "screws." There is always some excess or deficiency or twist somewhere. But, as he says, just as very few horses are altogether sound, as very much—practically, all that is required—may by judicious driving be got out of those which are in some way unsound, so the faculties of average men, if properly managed, may serve to accomplish all the purposes to which they need to be put.

For observe, that not only are the intellectual faculties strengthened by exercise, but by constant practice is acquired

the ability of bringing them at any time into instant and efficient action, even under circumstances of difficulty, or in spite of disturbing influences which are apt to throw them into confusion when not well drilled and disciplined.

We all know how hard it is to learn or think in the midst of distracting circumstances, how much study and meditation are assisted by quiet and solitude, how one train of ideas will obstruct another, how objects of sense oppose concentration of thought. I suppose it is an open question whether we should have had the Principia had barrel-organs become peripatetic in the time of Newton; and perhaps it is not too much to say that the greatest poem in our language we owe in part to one of the heaviest of human afflictions, for surely in some measure to the blindness of Milton was due the sublimity of his song.

So, gentlemen, he who would do justice to himself and his profession must, as a student, cultivate with all zeal and diligence those sciences upon which the practice of our profession is founded, those sciences which investigate the phenomena of life, the laws of health, the causes and effects of disease: I mean the natural sciences—anatomy, chemistry, physiology, and pathology. A certain amount of knowledge of these subjects you all know is necessary to everyone; but beyond this, these should be studied because they are eminently adapted to exercise the mental powers, to train the mind for the active duties of the profession. A certain amount of each must be learnt as a matter of necessity, but they should be studied in a very different spirit from this. I believe the time you spend upon them will be repaid tenfold by the comparative facility with which you will afterwards grasp the phenomena of disease, by the greater skill with which you will observe, interpret, and amend. And there is another reason, akin to this, why I would urge you to acquire some knowledge of the natural sciences. I am fully aware that you will have neither time nor opportunity to investigate them thoroughly; but if you only do justice to them as a means to the great end you have in view, you will learn enough of them, of their principles, to give you an insight into the works of nature that will augment in no small measure the enjoyment they afford. Surely knowledge here is not power only, but exquisite pleasure. The study for a while of the works of nature in their perfection is not only the happiest introduction to that which must be the study of your life—the causes which frustrate her designs in the last and noblest of them, and the means by which the operation of those causes may be averted or overcome,—but, as our days run out in constant association with pain and disease, we shall find, I think, in occasional excursions in these attractive paths most wholesome and befitting recreation for our moral not less than for our intellectual nature. Such pleasures should complement our duties in making us wiser and better men.

These must be studied because Medicine is not an exact science. We are constantly falling back upon general principles which are established by means of these sciences, and which therefore cannot be understood by one who is ignorant of them. This is the difference between rational practice and empiricism. With the scientific man empiricism is a last resource. The unscientific man has no other resource whatever. When one is at his worst he is on a level with the other at his best.

These should be studied with increasing labour, I believe, because Medicine in the future, even more than in the past, will depend upon its association with the natural sciences. Living upon them, it will grow and flourish; cut off from them, it must degenerate and decay.

(To be concluded.)

UNIVERSITY OF CAMBRIDGE.—The Professor of Anatomy gives notice that his course of lectures "On Human Anatomy and Physiology" will commence on Tuesday, the 23rd inst., at one o'clock P.M., and will be continued on Tuesdays, Thursdays, and Saturdays at the same hour. These lectures will be suitable to students of Natural Science, as well as to medical students. The demonstrations and the instruction in Practical Anatomy will be conducted in the old Anatomical Schools, and will be continued in the Christmas vacation. There will be microscopical demonstrations on alternate Mondays during term, at seven P.M., in the old Anatomical Museum, commencing on the 29th inst.

LETTERS from Nice state that not only has the mortality throughout the summer been less at Nice than usual, but on Sept. 27th not a single death had to be registered.

ON THE

TREATMENT OF PULMONARY CONSUMPTION BY HYGIENE, CLIMATE, AND MEDICINE.

BY J. HENRY BENNET, M.D.

(Continued from page 352.)

CLIMATE.

IF, as I have assumed, the deposit of tubercle in the lungs is a disease of defective nutrition, itself the result of exhausted or lowered vitality, the debated question as to what climate is the most calculated to arrest and cure the disease, is easily answered.

Theoretically, or sooner physiologically, a cool, dry, sunny, stimulating climate is the one most likely to rouse depressed vitality and health; not a warm, moist one. Practically, my own experience and that of many other observers shows that such is the case; that consumptive patients do best in a dry, cool, sunny region, and that they are rather damaged than improved by a warm moist climate.

This, the modern view, is certainly one of the most valuable contributions that modern science has made to the treatment of phthisis. And yet, although most true, I cannot say that it is a principle of treatment generally understood or practically carried out even in our own country, which is, I consider, much in advance of the Continent in the rational treatment of consumption. Indeed, abroad the hygienic treatment of phthisis is still in its infancy, and nearly all the old errors are in full operation.

Thirty years ago, when pulmonary consumption was generally considered to have an affinity to inflammatory disease, and when undue importance was attached to the inflammatory conditions—bronchitis, local pleurisy, local pneumonia—which characterise its later stages, it was quite natural that warm weather and warm climates should be considered desirable. In warm weather, as we have seen, when the skin and liver are acting vigorously in the work of blood purification, inflammatory affections of the lungs are neither common nor severe, and are easily subdued. Was it extraordinary that a warm climate should be thought the one thing desirable in the treatment of a disease, the prominent outward symptoms and features of which are these very inflammatory affections? And yet the results obtained by the antiphlogistic mode of treatment, combined with warm air, were so little satisfactory that most, nearly all, the patients died, and the disease itself obtained the reputation of being all but incurable.

If, as I maintain, following in the wake of many sound pathologists of the present day, these inflammatory conditions are merely epiphenomena, symptoms of a disease itself the result of organic debility, of exhausted vitality, having nothing akin to inflammation, it is clear that warm weather cannot cure them. Indeed, it is much more likely to aggravate them by increasing the organic debility which is at the root of the evil, and by interfering with that active nutrition which alone can arrest their progress.

Practical experience proves that such is the case; not merely my own experience, but the experience of the medical profession in many different climes and regions. Perhaps the most valuable and conclusive evidence on this subject is that furnished by the English and French Army Reports during the last thirty years. From them it has been established that soldiers suffering under tuberculosis of the lungs get worse in all warm climates, especially during the summer—in the East and West Indies, at Malta, in Algeria, &c. Consumptive soldiers are now sent home to a temperate climate from all these colonies, as the best course that can be followed for their welfare.

I may here mention a valuable illustration of this fact, drawn from private experience. My old friend, Dr. Dundas, practised for twenty-five years at Bahia in the Brazils, a tropical climate, leaving in 1845. Many years ago he told me that during his residence there he was constantly receiving patients from Europe affected with phthisis, sent there by the faculty as to one of the best climates that could be found for their disease. These patients invariably got worse, and died much more rapidly than if they had remained at home. So

fully did he become impressed with the conviction that the climate—a very healthy one in all respects but in its tropical character—was deadly to the consumptive, that if any of his own patients among the European population were thus attacked, he instantly sent them home to Europe.

These facts are at once explained when we recognise the principle that pulmonary consumption is a disease of debility, of exhausted vitality, and not an inflammatory disease of the respiratory organs; that it is an affection in which the indication for treatment is to strengthen, to invigorate, not to soothe and calm "symptoms." Warm weather produces languor, a disinclination to take exercise and to eat, often a positive disgust for meat and for fatty substances, and interferes with sound sleep. In warm weather the natural desire is to remain recumbent, idle, and half-dressed, to drink lemonade, and to eat ices. The attempt to take a fair amount of nitrogenous and carbonaceous food, from duty, is followed by disturbed conditions of the liver, and of the digestive and intestinal organs generally, to which there is so great a tendency at all seasons in the consumptive. I only ask, in common sense, is such a state of things, is a temperature or a climate that produces such results, to be relied on in a case of debility?

A temperate, cool climate, on the contrary, with the thermometer varying between 55° to 65° Fahr. in the day, and between 45° to 55° in the night, has a diametrically different physiological effect on the constitution. It braces and invigorates the system; it stimulates to exercise, improves the appetite, and admits of the ingestion and digestion of both meat and fats, so necessary for perfect nutrition. Thus it favours our attempts to rouse vitality by improving nutrition.

The temperature which I describe, one ranging from 45° Fahr. at night to 65° in the daytime, is physiologically the most conducive to the well-being and longevity of the human race. The extremes of cold and the extremes of heat, on the contrary, are not conducive to longevity. In warm climates generations succeed each other more rapidly than in temperate ones. The inhabitants marry early, reproduce their race early, inherit property and arrive at positions of trust early, and die early, to make room for the next generation. This is the case in India, and in tropical countries in general. In temperate regions the span of life is longer; the succession of its phases is less rapid, less feverish. Thus Scotland, essentially a cool temperate climate, is also one of the healthiest countries in the world; the average duration of life being, I believe, above that of any country in Europe. It is certainly above that of England, itself superior to continental Europe.

Having thus established the data by which we ought to be guided in the search of a climate calculated to assist in arresting and curing consumption, it remains to apply them. We may eliminate at once all tropical regions, all climates in which the mean annual temperature is high, above 60°, or where the winter mean is above 54°. It must be remembered that a high annual mean may be the result of extreme heat in summer, as at Malta, where the summer mean is 78°; whereas the winter mean is 57° only. At Mentone the winter mean is 49°, with a summer mean of 73°. (See Table, p. 408, in my work "Winter in the South of Europe.")

Firstly, as to summer, there is perhaps no better climate in the world for the consumptive than the British Isles. The nights are generally cool, and the days temperate, the thermometer seldom rising above 70° in the shade. Sometimes, however, it does: we have dog-days in England, days when the thermometer reaches 80°, or even ascends above. This degree of heat is very trying in England, much more so than on the continent, on account of the generally moist state of the atmosphere. Owing to our insular position, and to the warm water of the Gulf stream impinging on our western shores, the atmosphere is generally loaded with moisture, and the sky partially covered with clouds, even in summer. Warm moisture stops insensible perspiration, and is very oppressive and trying.

Generally speaking, this warm, oppressive weather is of short duration with us; but there are exceptionally warm summers, in which the thermometer may remain for many weeks above 70° in the daytime. This weather, really tropical in the south of England, is most pernicious to the consumptive; but they can easily escape from it by going north, to our northern counties, or to the Highlands of Scotland. The west coast of Scotland is proverbially moist; but moisture with the thermometer between 55° and 65°, as it generally is in summer in the Western Highlands, does no harm whatever, neither causing cold or cough nor increasing them if they already exist. A consumptive person, with a bad cough and free expectoration, provided he be warmly clothed and protected, may sit in a boat all day on a Scotch loch, exposed to frequent showers, in summer, with the thermometer at about 60°, without taking any harm. I have done so myself for weeks and months together, not only with immunity, but with the greatest possible benefit to the general health, and, as a result, to bronchial suffering.

Continental Europe is by no means so suitable as a residence for mid-summer, owing to the great heat which nearly everywhere prevails from June to September. The coasts of Brittany and Normandy, and those of Holland, however, share with the British Isles the milder climate which a canopy of vapour and cloud gives us, by protecting us from the direct rays of the sun. In central and southern Europe, and even in Switzerland, the only means of escaping great and pernicious heat is to ascend the mountains some four thousand feet. But in the higher regions there is a great drawback: the nights are often very cold in fine weather, through radiation; and in wet weather you may be in vapour and mist in the clouds for weeks together.

To find a temperate winter climate we must leave the British Isles, and descend south. Those who are suffering from phthisis or chronic disease of the respiratory organs, and can do so, thus immeasurably increase their chances of recovery. For seven months in the year, from the middle of October to the middle of May, not only is the temperature too low in Great Britain (generally below 55° Fahr.), but it is all but constantly moist. Cold moisture arrests the action of the skin, throws extra work on the lungs, and is a fruitful source of cold, influenza, bronchitis, pleurisy, pneumonia. Moreover, these influences increase and aggravate the inflammatory complications and sequelæ of phthisis. Indeed, a severe feverish cold, such as nearly all experience at least once in England during the winter season, may soften in a few days a great amount of tubercle, and create a large cavity; thus, in the course of these few days, the consumptive patient may pass from the first to the third stage of the disease. Indeed, chronic bronchial affections, whether existing alone or complicating phthisis or asthma, are all but constantly aggravated by our winter. The confinement, also, to which persons suffering from these affections must be condemned during the many months of bad weather which characterise an English winter, saps at the very root of constitutional improvement. After even a few days' confinement to the house, the appetite, digestive power, and nutrition flag; and thus a barrier is raised to the amelioration of the general health, which alone can arrest the progress of the disease.

After devoting seven successive years to the study of the winter climate of the south of Europe, after much travelling and reflection, after a careful perusal of the writings of other authors on climate, I have come to the conclusion that the most favourable and accessible climate for chronic disease of the respiratory organs, and especially for phthisis, as also for all diseases characterised by organic debility, is the undercliff of southern Europe, or the coast ledge which forms the north shore of the Mediterranean from Cannes to Pisa.

For the various climatic and meteorological data on which this opinion is founded I must refer to the third edition of my work entitled "Winter in the South of Europe," in which they are fully developed. I will only here state that the winter climate in this region is exactly the one which would theoretically respond to the requirements of phthisis as I have described that disease. It is cool, sunny, bracing, stimulating, and dry. During the invalid season, which may be said to extend from the 1st of November to the 1st of May, there are seldom more than about thirty days' rain. Thus, out of the one hundred and eighty-one days comprised in the six months named, about one hundred and fifty are generally days of brilliant sunshine—so dry that the hours from breakfast to dinner may usually be passed with perfect safety by an invalid, lying on the ground on a cloak in the sunshine. During more than half the days of rain even the rain is only partial, and several hours of sunshine are enjoyed.

In such a climate, if the rules which I have laid down in my work for the guidance of invalids in this to them unknown region are strictly adhered to, there is an energetic stimulus given to organic vitality, and, if it is not too late or altogether unattainable, the powers of the system are effectually roused. The appetite and digestion improve, assimilation and nutrition become more natural, the progress of disease is averted, and nature at once begins to repair existing mischief. In phthisis crude deposits of tubercle are often absorbed and reduced to their organic cretaceous elements, cavities cease to secrete muco-pus, and then contract and cicatrize. These are results which I witness every winter at Mentone, the most sheltered

and favoured spot of the whole Riviera, in many cases, although of course by no means in all. In many the disease is too far advanced, or the organic taint or exhaustion is too profound for any stimulus—hygienic, climatic, or medicinal—to arrest the onward progress of the malady. The rapidity only of its progress is modified, and it terminates by death, as in the ordinary run of cases in which all these means of treatment are not or cannot be applied.

There are cities in the south of Europe, such as Naples, Rome, Pisa, Malaga, that have long enjoyed an exceptional reputation in the treatment of pulmonary consumption. I believe that the climate of all these southern cities is very inferior to that of any part of the Riviera, with the exception, perhaps, of that of Malaga; but they are all, without any exception, very inferior to any part of the Riviera on hygienic and health grounds. They are all dirty, unhealthy southern cities, with a very high rate of mortality from the diseases which produce the same results in the worst parts of our worst cities.

I maintain that consumptive people should reside in the country or in the suburbs of healthy towns, in order to secure the most favourable hygienic conditions; these favourable conditions are not obtained by those who live in the centre of badly-drained unhealthy towns. On the Riviera, at Cannes, Nice, Monaco, Mentone, San Remo, the houses occupied by invalids are all suburban, in the country, with the sea in front and mountains behind.

The great winter sanitarium for consumptive invalids up to the present day has been Madeira. With all its charms and all its advantages, it does not appear to me to offer the conditions which are indispensable to rouse exhausted vitality. It seems rather to satisfy the requirements of the bygone period of the professional mind, when pulmonary consumption was considered a species of inflammatory disease, than to satisfy present requirements. For have I not repeatedly said that phthisis is now considered a disease of debility, of anæmia, of organic exhaustion, and of defective nutrition? According to the former view, a moist, mild atmosphere, a kind of natural orchid-house, would be just the place chosen. According to the latter, such a climate should rather be avoided, as calculated to depress vitality. The immunity from colds and inflammatory diseases of the respiratory organs which a mild, moist climate is calculated to afford, is purchased too dearly if it is gained by a loss of general tone, and by a diminution of appetite and nutritive power.

The most recent writer on Madeira, Dr. Stone, of the Brompton Consumption Hospital, says, in the pages of THE LANCET (December 2nd, 1865):—

"That the first effect of the climate of Madeira is peculiarly soothing. It is not until some months have elapsed that the balmy influences of equable temperature, and the soft breathing of moist, warm sea-breezes become absolutely cloying, and tend to enervate both mind and body. Some temperaments resist the approach of this *dolce far niente* longer than others; not a few, with well-meant efforts at resistance, pay by feverish attacks for unnecessary activity purposely indulged.....All local varieties, however, are subordinate to the dominant character of the climate, which is warm, equable, and moist almost to saturation."

The slightest consideration must lead any physiologist to the conclusion, that although such a climate may be a very agreeable one, may be especially soothing to all who are suffering from chronic bronchial disease, idiopathic or symptomatic, yet it cannot rouse organic vitality as the more trying, cool, dry, sunny climate of the undercliff of the Riviera undoubtedly does.

Seven years ago, impelled by the spirit of self-preservation, imbued with the views respecting the nature of phthisis which I have propounded in these papers, and which I believe are the views of the more advanced members of the profession at home and abroad, I carefully analysed the claims of the various winter stations. I thought of Madeira long and seriously, but shrank from it on the above-mentioned grounds. Already well acquainted with the south of Europe as a traveller, I thither directed my steps as an invalid, and I believe that I found in the Genoese Riviera the region that corresponds with the medical ideas of the day; the latter being an advance on the medical ideas of former times, and in my opinion the expression of truth. Dr. Stone, in the article I have quoted, thinks there is a fashion in these things—that formerly Madeira was the fashion, and that now the Riviera and Mentone are becoming the fashion. I believe that he is mistaken. Madeira was supported by the medical profession as long as it was thought that such a climate answered its requirements, which were then moisture and warmth. Now that it does so no longer, that other views prevail, that a cool, bracing, tonifying climate is demanded, Madeira falls in professional estimation, and the Riviera rises.

I thus lay claim to having been, during the last seven years, as a result of my break-down in health, once more a medical pioneer. I have sought and found a locality suited to the present state of the professional mind abroad and at home. All that I have written and said would have fallen to the ground had I not found a ready response in the tone of mind of my professional brethren, who, after all, alone direct public opinion in these questions.

(To be concluded.)

ON THE ENDOSCOPE AS A MEANS FOR THE DIAGNOSIS AND TREATMENT OF URETHRAL DISEASE.

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MY attention having been attracted by the description of Dr. Cruise's modification of Desormeaux's endoscope in the *Dublin Quarterly Journal* of May, 1865, I desired Mr. Matthews of Portugal-street to procure me one of the instruments, which, with some slight additions made by him, I have been using during the last twelve months. By the kind permission of the medical officers of the Lock Hospital in Dean-street, I have had the opportunity of examining some of their patients, and have thus been able to make a series of observations on cases of disease of the urethra, which I propose to bring before the profession. I must also acknowledge the great courtesy and assistance I have received from Mr. Antonini, the house-surgeon of the hospital.

For the benefit of those who may not have seen the endoscope, I may explain its nature in a few words. It consists of a paraffin lamp enclosed, for convenience, in a wooden case, from which the light is conducted through a lens on to a perforated mirror set at an angle in a cylinder. An eye-piece is adapted to one end of this cylinder, and to the other a screw, by which the various tubes which are to be introduced into the several outlets of the body may be attached. I have three tubes for the urethra, corresponding to Nos. 12, 10, and 8 of the catheter gauge, and which for convenience I call Nos. 1, 2, and 3, each measuring eight inches in length, and, being provided with an aperture on one side near the outer end, through which a wire carrying cotton-wool can be introduced into the interior of the tube, and be made to reach its extremity so as to wipe away any discharge from the surface under examination, or to apply medications to it. A larger tube of similar make is very efficient for examining the rectum; and a tube with a piece of glass at the end can be used for examining the interior of the bladder, the glass preventing the entrance of water into the tube. The light, which is very powerful, and quite under control, is directed by the oblique mirror to the end of whatever tube may be employed, and the eye of the surgeon is able to look through the centre of the pencil of light without being dazzled, and to observe whatever may be brought into the field at its extremity.

I have been able to use the endoscope satisfactorily on the urethra, bladder, and rectum, but shall confine this paper to my observations on the urethra, and particularly with relation to the treatment of gleety discharges. In using the instrument for the examination of the urethra, the most satisfactory position for the patient is the recumbent one on a table or sofa of good height, with the knees bent over the edge and slightly separated. The surgeon then introduces the largest tube which the meatus will admit, and passes it gently until he meets with an obstruction, or finds from the direction of the instrument that he has entered the membranous urethra, when it is well to pause lest on withdrawing the plug (which much facilitates the introduction, as with a vaginal speculum) a gush of urine should take place. The tube is now attached to the cylinder of the endoscope, which is placed horizontally, and the light being adjusted, the operator proceeds to look through, when he will see the surface of the urethra at the end of the tube shutting down upon it with perfect regularity if healthy, and by slowly withdrawing the instrument, with his eye still

fixed at the cylinder, he will be able to note the various modifications which the urethra may have undergone in its whole length, if necessary afterwards examining the prostatic portion.

Although practice on the dead body is useful at first for studying the manipulations, it is necessary to observe the living urethra to gain a knowledge of the appearance of the mucous membrane in health; for, as both Desormeaux and Cruise have pointed out, the pallid appearance of the anterior part and the dark purple of the bulbous portion of the urethra, as seen in the dissecting-room, are due to post-mortem change, the healthy urethra in life being of a bright pink throughout, and only very slightly deeper in colour about the bulb. For the sake of contrast, although it is impossible to convey the full idea without colour, I have given a sketch of a healthy urethra as seen with the endoscope (Fig. 1), and it may help the appre-

FIG. 1.

ciation of it if I say that it resembles very closely, on a smaller scale, a healthy rectum as seen through a speculum, or a vagina, but with the difference that the folds of mucous membrane of the healthy urethra are longitudinal instead of transverse. I have noticed in perfectly healthy urethras that there is a constant vermicular contraction of the wall of the canal, apparently passing towards the bladder; and this accounts for the well-known fact that foreign bodies in the urethra tend to pass in that direction. This is due, of course, to the muscular fibres of the urethra, and is wanting in cases where any induration exists. The mode in which an indurated and strictured (even though very slightly so) portion of the urethra closes down abruptly on the end of the tube as it is withdrawn is very characteristic, and contrasts strongly with the gradual closure of the healthy canal.

Great gentleness is necessary in introducing the urethral tube to avoid the induction of hæmorrhage; and, indeed, it is hardly possible, in diseased urethras, to avoid a few drops of blood, which obscure the view at first, but can be readily removed by the careful introduction of a pledget of cotton wool by means of one of the wires I have previously mentioned. Where hæmorrhage has exceeded a few drops, so as to form a coagulum in the tube, it is, I find, better to withdraw the tube and cleanse it, than to attempt to sponge it out with cotton wool *in situ*, since the clot is very difficult to extract satisfactorily, and is apt to be pushed on into the urethra. The cotton wool, if not carefully twisted on to the wire, may become detached and be left in the tube, or beyond it in the urethra. It may be fished out with a hook supplied for the purpose, but even if left in the urethra it does no harm beyond stopping the inspection for the time, since it is always passed on the first occasion of making water.

The application of a solution of nitrate of silver to its actual seat is one of the most useful methods of treating the disease revealed by the endoscope, and it is readily accomplished by one of the cotton-wool sponges I have described. The solution I have invariably used is that recommended by Desormeaux—namely, twenty grains of the salt to a drachm of water (1 to 3). This, although so much stronger than any of the ordinary urethral injections, excites no disturbance when applied to the diseased surface, and ordinarily gives nothing more than a momentary smarting pain. I have never seen any inconvenience arise from its use, although, as might be expected, it sometimes increases the discharge for a day or two. The use of injections, and of internal remedies, must be had recourse to as well, however, in order to effect a cure, in the majority of cases.

Granular urethritis, as described by Desormeaux, appears to be of by no means infrequent occurrence in the male urethra, where it keeps up a constant slight discharge—in fact, that slight remnant of gleet, the "morning drop," which is such a trouble to both the patient and the surgeon. I have been able to detect this condition in various parts of the urethra, sometimes confined to a small spot, and at others spreading for some distance, its most favourite seat being the bulbous portion of the urethra. Here, when the granulations are of large size, they materially narrow the calibre of the canal, giving rise to what may be termed a granular stricture (as in Fig. 2), which is perfectly different in appearance from the true organic stricture (see Figs. 4 and 6), though it is not improbable, as pointed out by Desormeaux, that a long-continued granular condition may lead to the development of a true organic stricture. In fact, this method of the development of stricture has long been known to surgeons, who, in cases of long-standing gleet, always apprehend the formation of a stricture. The appearance of the granulations, even when of small size, is very characteristic; and as they come into view the moment the tube is introduced, it is impossible that they can be due to the irritation of its presence, as has been stated by some observers. The granular condition will be best described by comparing it with that familiarly known as "granular lids," which the florid granulations cause it closely to resemble; and the treatment is the same—viz., the local application of the strong solution of nitrate of silver I have already mentioned. Not only does this take down the granulations and restore the healthy appearance of the mucous membrane, but *pari passu* the calibre of the strictured portion of the urethra increases; and thus I have frequently found that after a few applications of the solution the largest sized tube is able to pass where it had previously been prevented, and this without the use of any dilating instruments whatever.

Organic stricture may be most certainly and readily diagnosed by means of the endoscope. If the stricture be too small to allow the tube employed to pass, it will bring the face of the stricture into view, when the canal will be seen to be contracted in various ways, either to a ring, which need not be in the centre of the canal (Fig. 6), or to a slit (Fig. 4), which may have different directions. Should the stricture be only very slight, so as to allow the passage of a tube, the peculiar abrupt closing of the canal upon the tube already alluded to will indicate at once the position of the induration and the consequent loss of elasticity. Where the stricture is of any extent, I have found that there is a decided modification of the shape of the canal in different parts of it, and this is well shown by the figures illustrating Case 3.

In cases of organic stricture I have succeeded in introducing a fine wire through the endoscopic tube into the contracted orifice, and having removed the tube, have then passed over the wire an elastic catheter, which I have thus guided through the stricture; thus demonstrating the possibility of relieving the bladder in the case of a difficult and, to ordinary methods of treatment, impermeable stricture. Both Desormeaux and Cruise have thus treated cases of difficult stricture; but they do not appear to have had the opportunity of relieving a distended bladder by this means any more than myself.

The diagnosis and treatment of *urethral fistulæ* and of *urethral chancre* would doubtless be greatly facilitated by the use of the endoscope, but as I have at present no personal experience to narrate on these points, I shall pass on to the relation of some of the more interesting of the cases which have come under my notice, and which will serve to illustrate the observations already made. I may premise that, having taken my vacation during August, some of the cases are necessarily incomplete.

CASE 1.—J. M——, aged twenty-nine, has had a gleety discharge for three months.

April 17th.—No. 1 tube passed easily. Endoscopic examination showed the bulb to be congested and granular, and it was painful when the tube passed through it. Solution of nitrate of silver (twenty grains to one drachm) applied through the tube.

21st.—Discharge increased slightly after the application, but has now ceased almost entirely. Endoscope shows the mucous membrane of the bulb less congested and smoother.

28th.—Patient has drunk beer for a couple of days, and has had a slight white discharge since. Endoscope showed urethra down to bulb healthy, but on reaching the bulb hæmorrhage came on and obstructed the view. No. 10 catheter was passed and kept in for a quarter of an hour.

May 8th.—The discharge having increased, he was ordered a sulphate of zinc injection.

26th.—Discharge still purulent, but he allows that he has been drinking. Endoscope showed a granular condition four inches down the urethra, to which the nitrate of silver solution was applied.

June 2nd.—Granular condition of the bulb very distinct. Nitrate of silver applied.

4th.—Discharge diminished. No examination.

9th.—Endoscope showed the bulb still granular. Solution applied.

16th.—Has had hardly any discharge for the last few days. Endoscope shows bulb pretty healthy, and the large tube can now be passed into membranous urethra easily.

23rd.—Discharge has entirely ceased. (Has not re-applied.)

CASE 2.—William L——, aged twenty-three. Had gonorrhœa two years ago, and gleet on and off ever since. Has a

slight clear discharge constantly of a morning, and the orifice of urethra glued up.

I made two or three unsuccessful attempts to examine this patient's urethra, but was foiled by the free hæmorrhage. On May 1st I succeeded in bringing into view a projecting excrescence three inches down the urethra, but the bleeding was too free to admit of any topical treatment. On May 15th I distinctly brought into view, three inches down the urethra, several wart-like projections (which are shown in Fig. 2), and applied the solution of nitrate of silver to them.

FIG. 2. FIG. 3.

May 19th.—Says he is better, and that the discharge is diminished. Endoscope showed the growths diminished, and they were again touched with the solution.

22nd.—Discharge much less. Endoscope showed granulations much smaller and the resulting stricture larger.

29th.—Improved. The discharge has diminished, and he passes water better than he did. No. 10 catheter passed.

June 4th.—Granulations nearly gone. The canal of the urethra is seen at the upper part of the field, and is triangular. (Fig. 3.)

12th.—Endoscope showed the same, but urethra larger. Solution of nitrate of silver applied.

26th.—Endoscope showed the mucous membrane of the interior part of the urethra to be quite healthy, but the canal closes upon the tube a little abruptly.

July 17th.—The least stickiness at the orifice of the urethra seen now and then in the morning. No. 12 catheter passed.

24th.—Discharge slightly increased. Endoscope showed distinct small granulations at the bulb. Solution applied.

I did not see this patient again until Sept. 22nd, during which time he had been using an injection, and had had a slight gleety discharge. I found that the granulations at the bulb had slightly increased, but that the anterior part where the large growths had been was healthy in appearance and but very slightly strictured, admitting No. 10 catheter readily. Solution of nitrate of silver was applied to the granulations.

Sept. 29th.—Much improved, and the discharge nearly gone.

CASE 3.—Charles K——, aged twenty-five, masturbated up to the age of seventeen. He then got a clap, and has had urethral discharge more or less ever since. Began to suffer from stricture four years ago.

April 24th.—The endoscope showed an organic stricture three inches down the urethra, which admitted a No. 5 silver catheter. (See Fig. 4.)

FIG. 4. FIG. 5.

May 8th.—No. 5 catheter passed.

15th.—Mr. Antonini, the house-surgeon, split the stricture with Holt's dilator; and a No. 10 catheter has been passed daily since.

19th.—The endoscope showed the face of the split stricture as in Fig. 5.

29th.—Passed No. 10 catheter.

June 4th.—No. 1 tube showed the face of the stricture as before, but would not enter it. No. 2 passed through, and exhibited the mucous membrane paler than normal, and the induration extending beyond the point where the stricture was split.

26th.—The patient has been passing No. 10 bougie for himself, but says he finds a difficulty in doing so, and that a slight gleet and chordee continue. The endoscope shows the stricture still present, though it will admit No. 10 catheter. The appearance of the strictured portion from before backwards is shown in Figs. 6, 7, 8, and 9.

FIG. 6. FIG. 7. FIG. 8. FIG. 9.

July 17th.—He says he has been using No. 10 bougie regularly, but that the stricture has contracted. I could not pass No. 1 tube through the stricture, but got No. 10 catheter in with some difficulty.

I have not seen this patient again.

CASE 4.—Wm. M——, aged twenty-one. He has a slight discharge; had gonorrhœa five years ago, and was treated with injections.

April 28th.—The endoscope showed the posterior part of the urethra healthy; in the anterior part, two inches down, I found a granular surface, which I touched with the solution of nitrate of silver.

May 1st.—The discharge has diminished. The endoscopic examination unsatisfactory owing to hæmorrhage.

8th.—The discharge has diminished, and disappears altogether at times.

18th.—The patient says he is quite well, and has not seen any discharge for four days; is to be married three days hence.

CASE 5.—George A——, aged twenty-six. He has had a gleet since Christmas, and has been using an injection and taking cubebs ever since.

May 15th.—The endoscope exhibited a granular state of the urethra an inch and a half down the urethra, the rest being healthy. Solution of nitrate of silver applied.

19th.—Has had a purulent discharge, which has diminished this morning. No examination.

21st.—The endoscope showed granular condition improved. A slight thin discharge is present. Solution applied.

June 2nd.—The endoscope showed a granular patch three inches down. Solution applied, and the cotton plug accidentally left in.

9th.—Granular condition still present. Solution applied.

July 3rd.—Has had no discharge for a week, and very little before that. The endoscope showed urethra to be healthy.

17th.—Has had no discharge. No. 10 catheter passed easily.

CASE 6.—William C——, aged twenty-eight. Had gonorrhœa five years ago, and has had a discharge more or less ever since. Was married a year ago, and gave his wife a discharge, and has lived with her since. Has a slight clear discharge, increasing upon pressing from the back part of the urethra.

June 9th.—The endoscope showed a distinct stricture at the bulb, with remarkable projecting granulations around (see Fig. 10), through which the tube would not pass. On slightly

FIG. 10. FIG. 11.

withdrawing the tube, the appearance given in Fig. 11 was seen. The solution of nitrate of silver was applied.

16th.—Has had considerable yellow discharge and pain in urinating, but these have diminished during the last two days. No. 1 tube passed with care through the stricture, and into the membranous urethra, which was healthy. On withdrawing the tube, the granulations in the bulb were found to be much diminished, but still visible. Solution applied.

23rd.—Discharge nearly stopped, and clear. No. 1 tube passed easily into the membranous urethra. On withdrawal, the bulb was seen to contract more abruptly than in health, but the granulations have nearly disappeared. No. 12 catheter was passed, and retained a quarter of an hour.

July 3rd.—Very slight discharge seen occasionally. He makes water in a much better stream. Endoscope showed the granulations much improved, but stricture still present. To use an injection of sulphate of zinc.

17th.—The discharge increased after the last visit, but has now diminished. No. 12 catheter passed easily.

Aug. 4th.—Slight sticky discharge is occasionally visible at the meatus. No. 1 tube passed readily into the bladder, but on withdrawing it the stricture was still visible. Solution applied.

CASE 7.—Edwin J——, aged twenty-one. Had gonorrhœa for the second time two years ago, and has had two gonorrhœas and more or less gleet since that, the last gonorrhœa being ten months back. Has had a constant thick discharge, and finds nothing but copaiba keep it under.

June 9th.—Endoscope showed the bulb very vascular and granular. Solution of nitrate of silver applied.

16th.—Greatly improved. Passed some blood with his urine for the first two days after last visit. The thick discharge has quite ceased. There is slight stickiness at the meatus in the morning. The bulb is much improved, but is still granular. Solution applied.

23rd.—Has only a drop of clear fluid in the morning. Has attempted connexion, but failed, owing to premature emission. Endoscope showed the bulb still slightly granular. Solution applied.

30th.—Endoscope showed the bulb much improved. Solution applied, and to use injection of sulphate of zinc.

July 7th.—Much improved. Endoscope showed bulb nearly healthy. To continue the injection.

28th.—Is well.

Cavendish-place, Sept. 1866.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. BARTHOLOMEW'S HOSPITAL.

EXTIRPATION OF THE SUPERIOR MAXILLARY BONE FOR MALIGNANT DISEASE; HÆMORRHAGE ON EIGHTEENTH DAY; LIGATURE OF THE COMMON CAROTID ARTERY; DEATH.

(Under the care of Mr. HOLMES COOTE.)

THE operation which was performed in this case is so generally successful, and so very seldom complicated by serious secondary hæmorrhage, notwithstanding the vascularity of the parts exposed and the free bleeding which always occurs at the time, that the record subjoined is of interest.

Angus R——, aged forty-six, a cellarman at ale and beer stores, was admitted July 31st, 1866. He was an intelligent, but poorly nourished and pallid, bloodless-looking man, who in his avocation was much exposed to cold. He said that about last January, after unusual exposure to cold, he suffered severe pain of a neuralgic character in the left cheek, which he attributed to the irritation of a carious tooth; a fortnight afterwards he had the tooth extracted, but the pain of the face continued. About the beginning of June he first noticed a swelling in the mouth; there was general enlargement of that side of the face, and a small prominent red tumour below the left eyelid near the inner canthus.

On examination, Mr. Coote detected an ulcerated cancerous growth affecting the left half of the palate; its absolute extent posteriorly could scarcely be ascertained. There was an offensive smell from the mouth. The superior maxillary bone was generally enlarged. The small tumour of the cheek was opened, and gave exit to some thick cheesy-looking matter. A probe passed through some thickish substance readily into the antrum.

The nature of the case having been ascertained, Mr. Coote, at the patient's earnest request, removed the whole maxillary bone on Aug. 4th. The incision through the cheek was curved outwards from the canthus of the eye, in a sweep, into the mouth. The bone was soon removed, the only difficulty proceeding from the soft and friable nature of the morbid growth. No bad symptom supervened, and the wound closed by first intention.

On Aug. 18th there ensued some amount of hæmorrhage from the mouth. It ceased on the application of ice in five minutes. On the 21st hæmorrhage returned. On the 23rd, Mr. Orton, the house-surgeon, was suddenly called into the ward, and found the patient blanched and senseless from a sudden and continuous gush of blood. The pulse was not perceptible. He immediately tied the common carotid artery, and the hæmorrhage was at once arrested. Nourishment was given, and the patient expressed himself as comfortable, but death ensued about two hours after the operation.

The artery is preserved in the museum of the hospital. The source of hæmorrhage was a branch of the internal maxillary artery, which opened into some of the diseased tissue.

ST. THOMAS'S HOSPITAL.

STRANGULATED HERNIA; OPERATION; RECOVERY.

(Under the care of Mr. LE GROS CLARK.)

VERY difficult is the attempt to judge before an operation is performed where the seat of stricture in hernia will be found. An illustration of this occurred a short time ago in a case treated by Mr. Le Gros Clark. The patient (C. M., aged forty-nine) was a butcher, who had been previously an inmate of the hospital with strangulated hernia, which, however, was reduced. On the present occasion the hernia had descended into the scrotum, and was very tense and tender. The ordinary symptoms of acute strangulation had existed but a few hours, but were of so urgent a character that, after an unavailing attempt to reduce the rupture by taxis, Mr. Le Gros Clark performed the usual operation for the relief of the patient. The acuteness of the symptoms and the suddenness of the attack suggested the idea that the external ring might be the seat of strangulation; but its edge was divided without relief. On introducing the finger into the inguinal canal, a strong but fine fibrous band was felt stretching across and external to the neck of the sac. This band had precisely the feel of a tight horse-hair, and required the knife for its division. Immediately this was accomplished, the contents of the hernial sac were returned into the abdomen with great facility, and the patient made a good recovery. The position of this solitary band within the external ring, and at right angles to its pillars, renders it probable that it was one of the intercolumnar bands, exposed by the separation of the aponeurosis of the external oblique muscle. Mr. Le Gros Clark has noticed a similar relation in the post-mortem dissection of an inguinal rupture.

WESTMINSTER HOSPITAL.

SEVERE PUNCTURED WOUND OF THE BUTTOCK AND PERINEUM, WITH INJURY TO THE PERITONEUM, THE RESULT OF A FALL FROM A SECOND-FLOOR WINDOW ON TO THE AREA RAILINGS.

(Under the care of Mr. BARNARD HOLT.)

MARY A. B——, aged twenty-six, a servant, was admitted into the hospital suffering from the above injury. She stated that while cleaning windows on the second floor she lost her balance, and fell upon the area railings, upon which she became impaled. She was removed by the bystanders, and immediately brought to the hospital. On admission, it was found that she had received two very severe wounds, one running deep between the glutei muscles, and the other entering the ischio-rectal fossa, wounding the levator ani and, as the symptoms subsequently showed, the peritoneum. The whole length of the finger could be readily passed into either wound. Being greatly prostrated, although there had not been any material hæmorrhage, some ammonia-and-brandy was administered, and she quickly rallied. In the evening Mr. Holt found the patient hot and thirsty, and the wound in the buttock, as well as that in the perineum, looked swelled and puffy; and from the latter there was a continued dripping of limpid fluid, slightly tinged with blood, this escaping in such quantities as to saturate the bed upon which she was lying. She was ordered a mixture of acetate of ammonia and opium, and fomentation to be applied to the wound.

She had but little sleep, and on the following day the pulse was 120; skin hot. She complained of great thirst, was slightly delirious, and the abdomen was tender. The limpid fluid still continued to escape in large quantities. Arrowroot and milk for diet; turpentine fomentation to the abdomen; to continue the mixture, and take half a grain of opium every three hours. In the evening she was restless and wandering; the pain had been relieved by the turpentine, but the fluid continued to escape.

On the second day she was slightly improved, but still complained of pain when the lower part of the abdomen was pressed. The bowels had not acted; but Mr. Holt did not think it advisable to order any purgative. The opium and fomentations were continued. The urine was quite natural, free from blood, and passed without pain.

On the third day she was still gradually improving; the watery fluid, which had previously escaped in large quantities, began to diminish, and the wounds looked more healthy

and less red. From this time she gradually improved; the wounds suppurated kindly; the watery escape gradually diminished; her bowels acted naturally; her appetite returned; and at the present time, nearly three weeks from the accident, she is almost convalescent.

Mr. Holt remarked that the main interest in this case, apart from the serious nature of the wounds, was the escape of an abundant limpid secretion from the perineal wound. The examination made at the time of the patient's admission proved the depth of the wound to be considerable, and in the direction of the pelvis; and as it was quite clear so much fluid could not be secreted by any wound, and, moreover, as it only escaped from that opening which corresponded to the perineum, there was every reason to believe the perineal wound had punctured the peritoneum, and given rise to low peritonitis, which gradually closed the opening, and prevented any further escape of fluid.

MIDDLESEX HOSPITAL.

CASE OF CHOLERA TREATED WITH SALINE INJECTIONS INTO THE VEINS.

(Under the care of Dr. MURCHISON.)

Two points of especial interest are to be observed in the following case. 1st, the improvement which followed the injection into the vein of a fluid *lower* in temperature than the body; and 2ndly, the return of purging (which had ceased for three hours) after the injection. Our readers will remember that Dr. Johnson is inclined to ascribe the temporary benefit often following this mode of treatment to the relaxation of spasm of the minute arteries by the *high temperature* of the injection. The circumstances of this case would seem to militate against such a view. On this subject we may also refer to a paragraph in Dr. Macpherson's recent work, "Cholera in its Home," p. 122. He says: "Mr. Scriven, Principal of the Medical College, Lahore, a very acute observer, assures me, however, that he has produced this marvellous revival with injections of fluid of the normal temperature of the blood."

Sophia W——, aged forty-three, began to suffer from diarrhœa about the 7th of September, which continued until the 17th. At two A.M. on the latter day she was seized with very severe cramps, and a gush of watery fluid from the bowel. Being in the family way she fancied that labour had come on, and sent for assistance to the Middlesex Hospital. The purging was very profuse, and accompanied by vomiting, and the evacuations in both directions were colourless, and compared to milk. About six A.M. both the vomiting and purging ceased, and did not return until her admission into the hospital at a quarter to twelve A.M.

On admission, the patient was in a state of collapse. The eyeballs were deeply sunk, and the face and hands shrunken and livid. The pulse was absent at the wrists, and barely perceptible in the brachial arteries; in the carotids it was 120. The respirations were 28, and laboured. The surface of the body and the breath felt cold; the temperature in the axilla was 94·6° Fahr. The patient complained of great thirst. A copious watery motion was passed while she was being undressed, and there were still severe cramps in the lower limbs and abdomen. There was marked *vox cholerica*, with great restlessness and apathy, but no impairment of the mental faculties. The patient was at once placed in a warm bath, and afterwards enveloped in a blanket wrung out of hot water and sprinkled with mustard. Ice was given to suck, and a mixture was ordered every hour, each dose containing one drachm of sal volatile, twenty minims of chloric ether, and five minims of Battley's solution of opium.

At first she seemed to rally slightly; the skin perspired profusely and became warm; the temperature in the axilla rising to 97°. But at half-past four P.M. the collapse had evidently increased. The pulse was no longer perceptible even in the brachial arteries, and could scarcely be felt in the carotids. The respirations had risen to 48, and were very embarrassed. The pinched appearance of the features had increased, and the whole surface felt cold. The temperature in the axilla was 96·8°; but in the anus it was 100·2° Fahr. For the first two hours after admission she was repeatedly purged, and she vomited occasionally; but since two o'clock there had been neither vomiting nor purging.

At half-past four P.M. Mr. Moore, at Dr. Murchison's request, injected forty fluid ounces of a saline solution into the right brachial vein. It was composed as follows:—Chloride of sodium, a drachm and a half; chloride of potassium, half a drachm; phosphate of soda, ten grains; carbonate of soda, five grains; water, two pints. The temperature of the solution was that of the patient's rectum—viz., 100° to 101° Fahr.; but this was before it was taken up into the brass syringe. The syringe, which held about six ounces, was not at all heated; and as the injection was thrown in very slowly (the whole operation occupying nearly three-quarters of an hour) the temperature of the fluid before entering the vein must have been at least several degrees below 100°. The first twelve ounces had not been injected before there was a visible improvement in the symptoms; and by the time that one pint had been thrown in the improvement was decided. The pulse could be counted not only in the brachials but even in the radials, which had not been the case since admission. The respirations fell to 26, and were less laboured. The face seemed to fill out and the colour improved, and the patient expressed herself as feeling easier. But the improvement was transient. Before the injection was concluded it was observed that the patient's condition had got worse again, and it was then discovered that the purging, which had ceased for three hours, had returned with great force. The watery evacuations had soaked through the bedding and formed a pool on the floor beneath. At half-past five o'clock the pulse was again imperceptible in both radial and brachial arteries; and at six o'clock the respirations were 44. Between half-past five and half-past seven P.M., when the patient died, the bowels were repeatedly purged. The temperature in the axilla, immediately before death, was 97°.

At the autopsy the usual appearances after death from cholera were found in the stomach and intestines. The bowels contained about a pint and a half of colourless fluid, throwing down a copious sediment of white flakes, composed mainly of the columnar epithelium from the intestinal villi. The lungs were not at all collapsed. The right weighed 22¼ ounces, and the left 16 ounces. Both were much congested and œdematous posteriorly; and on section there exuded a large quantity of dark, thin, bloody fluid. Both sides of the heart contained a small quantity of dark fluid blood. The venæ cavæ and pulmonary arteries contained a good deal of dark blood, which was much more fluid than is usual in cholera. The portal vein was also full of dark blood, but the liver was pale and friable.

The uterus contained a fœtus of apparently about six months and a half, in the intestines of which there was normal meconium.

Reviews and Notices of Books.

On Dropsy, and its connexion with Diseases of the Kidneys Heart, Lungs, and Liver; as well as on some other Diseases, of those Organs without Dropsy. Illustrated by numerous Drawings from the Microscope. By W. R. BASHAM, M.D., F.R.C.P., Physician to the Westminster Hospital, and Lecturer on the Principles and Practice of Medicine. Third Edition, enlarged, revised, and rearranged. London: Churchill and Sons. 1866.

WHEN a book reaches its third edition little remains for the reviewer but to congratulate the author; to point out any additions to, or alterations in, the plan or matter of the work; and to indicate any faults that may admit of amendment in future editions.

The general plan of Dr. Basham's present edition will be understood by a statement of the way in which he treats his subject. Thus Part I. is devoted to a discussion of those cases in which the Kidneys are primarily affected. Part II.: Dropsy in connexion with Diseases of the Lungs and Heart; Kidneys secondarily affected. Part III.: Diseases of the Kidney without Dropsy.

The great pathological idea which pervades Dr. Basham's views on renal subjects is, that the careful observation of the urinary deposits by the microscope is the most reliable guide, not only to the real nature, but to the particular stage and rate of progress, of any given case. He disparages the more common criteria, such as the specific gravity and the amount of albumen. There can be no doubt that Dr. Basham is right in attaching great importance to the character of the renal

cells, though his own book, we think, shows that it is possible to be guided in prognosis too exclusively by the microscope. Another point on which Dr. Basham properly insists is, that the degeneration of the renal cells is generally only a part of a more extensive degeneration of similar structures in other parts.

The book is very convenient as giving at once a scientific and clinical view of the significance of dropsy. Dr. Basham has incorporated with this edition the chief part of his Croonian Lectures delivered before the College of Physicians in 1864, illustrating the subject of Dropsy in relation to Diseases of the Lungs, Heart, and Liver. Other important additions are to be found in the records of cases illustrating the subjects of Gouty Kidney, and Calculous Disorders, especially with reference to the remedial use of the citrate of potash and lithia.

We will only specify one fault, which may possibly be removed in future editions. There is too much repetition of the same matter. The correction of this fault would make room for a larger clinical illustration of the various forms of Dropsy and their treatment. It is satisfactory to find successive editions of a work on degenerative forms of disease speak, on the whole, more hopefully of the power of controlling, if not of curing them.

Medical Diagnosis, with special reference to Practical Medicine. A Guide to the Knowledge and Discrimination of Diseases. By J. M. DA COSTA, M.D., Lecturer on Clinical Medicine and Physician to the Pennsylvania Hospital; Fellow of the College of Physicians of Philadelphia; President of the Pathological Society of Philadelphia; Corresponding Member of the New York Pathological Society, &c. &c. Illustrated with Engravings on wood. Second Edition, revised. Philadelphia: J. B. Lippincott and Co. 1866.

A VERY large first edition of Dr. Da Costa's book has been sold in eighteen months. Considerable additions, extending over ninety pages, have been made in this edition. The principal additions are in the chapters on Diseases of the Brain, of the Larynx, of the Blood, those on the Urine, and on Parasites, and in the section on Abdominal Enlargement.

We consider a work on Diagnosis to be essentially a pretentious undertaking, tasking the very highest and acutest faculties of the mind. The larger the scale of the work, of course, the more pretentious and the more difficult the undertaking. Dr. Da Costa's work is on a large scale. It includes all medical forms of disease. And we have to report that the undertaking has been admirably executed. We have been struck with the way in which Dr. Da Costa seems to have remembered every separate form of disease, though the plan of his book is such that he might easily have failed to do so. He has grouped diseases according to their marked symptoms, not in compliance with the usual pathological classification in systematic works. He has succeeded remarkably well also in stating those detailed points the faculty of observing which makes the difference between the diagnostic faculty of one physician and another.

Dr. Abercrombie once, on being called into consultation in a case presenting principally stomach symptoms, expressed his belief that in a few days the patient would die in a state of coma. He astonished his colleagues in the case. They were still more astonished when Dr. Abercrombie's prognosis came true. They asked the great physician by what process of observation and reasoning he had formed his accurate opinion. His reply was that he could not tell them—meaning that he could not convey to their minds a correct idea of the exact nature of the impression made by the case upon his own mind. This must always be more or less true of a certain number of men like Abercrombie, who have the physician's faculty—whatever that may be—in the highest degree. But the modern improvements in our means of diagnosis, and the care with which they have been used to the clearer differentiation of disease, go far to facilitate diagnosis and to make errors in it more inexcusable.

Dr. Da Costa's book is of a kind for which there was good room in medical literature. It is quite up to the time, and discusses the value of the aid given in diagnosis by recent instruments, such as the sphygmograph, the thermometer, and the æsthesiometer. The publisher's work is well done: the paper, the type, and the compact binding of the volume really contrast favourably with some books recently turned out by English publishers.

Of course the work is not perfect. Occasionally points of importance are omitted, or too generally stated. Thus, in the account of arsenical poisoning, the whole allusion to the remarkable nervous symptoms that are found in some forms is comprised in the following sentence:—"Œdema of the face and limbs, irritability of the stomach, diarrhœa, and increasing nervous derangement, mark the progress of the case." In the account of the consecutive fever of cholera, though its essential features are indicated, there is more vagueness than there should be. We read of cerebral symptoms, but have no mention of the nature of them, though they are very peculiar and characteristic. We read of the urine in this stage being scanty, but not of its being either suppressed or highly albuminous. As accuracy of detail is of the very essence of good diagnosis, we have thought it right to point out one or two exceptional instances in which the author might have been more definite. But the exceptions we have referred to do not alter the rule of his general accuracy. The work is a very valuable one, and one from which those who are apt to pride themselves on their ability to distinguish diseases may constantly get help.

Osteology for Students. By A. T. NORTON. With an Atlas of Plates. London: Hardwicke.

MR. NORTON has succeeded in producing a work on osteology which has not only novelty to recommend it, but useful novelty. The precision of Ward has always recommended his work as an excellent—the most excellent descriptive treatise on the bones; but its extreme minuteness, almost amounting to prolixity, and the absence of illustrations, have stood in the way of its general use. Mr. Norton seems to have adopted Ward as a sort of model in description, (and this he implies also in his preface,) and to have imitated his exactness and completeness, while attempting greater brevity. An admirable atlas of the bones, bound separately in a stout but limp cover, and suited for the pocket, accompanies the volume. So that the student, while reading, has before his eyes the points marked, to refer to in explanation of the description, and with which to compare the bone, which he ought also to have on the table in order to verify upon it the markings shown and named in the plate. The references to the plates include the attachments of all the muscles, and enumerate all the structures transmitted through the various foramina; so that it is in itself a very instructive and compact anatomical remembrancer of the best kind. We would particularly call attention to the illustrations of the carpal bones. They are the best extant, and will facilitate for the student a difficult part of his work in osteology. Altogether this is the handiest and most complete handbook of osteology with which we are acquainted, and from the beauty and fulness of the illustrations, which are all from picked natural specimens, and the very remarkable cheapness of the work, we can predict an extensive sale, which can hardly fail to spread the reputation of the author as a teacher of anatomy, although we should think that it could barely be profitable at the price fixed.

THE Social Science Congress at Manchester was brought to a close on Wednesday. The meeting next year will be at Belfast.

UNIVERSITY OF ABERDEEN.—Drs. David Fiddes, Wm. Henderson, and Wm. Keith have been elected Examiners for Graduation in Medicine for 1866–7; and Dr. David D. Brown has been appointed Assistant to the Professor of Materia Medica and Medical Jurisprudence.

THE LANCET.

LONDON: SATURDAY, OCTOBER 13, 1866.

THE time seems now to have arrived when we may, so far as the metropolis is concerned, with propriety bring together in a comparable form the data which the several epidemics of cholera during their visits to this country supply as an inductive basis for determining how far any theories hitherto accepted are warranted by the results of extended observation.

The outbreak which recently occurred in London is the fourth of which we have trustworthy record, and it is satisfactory to know that in each successive epidemic the experience of its predecessors has been turned to good account by the statists upon whom we rely for an accurate record of facts. In 1832–33 our present elaborate system of registration was not yet conceived, and the returns of deaths specially made to the Privy Council were no doubt very defective; in 1848–49 the Registrar-General's mortuary returns yielded reliable results; and, as registration probably improves every year, we may take it that the returns are now practically so complete as to render deduction from them quite safe within reasonable limits. An hypothesis which rests on a small and imperfect series of facts is useful as an indication of probabilities; increase the area and accuracy of the premiss, and the conclusion becomes more nearly axiomatic; and thus in any scientific inquiry the results are more or less valuable as they flow from a large or a limited number of observations. For instance, the theory of the influence of impure water in the development or dissemination of cholera, when it was first mooted, was accepted as a fortuitous coincidence merely; but when a second series of observations confirmed the theory its weight was immensely increased, and so when a third epidemic period arrived the relation between the two things was adopted as a legitimate basis of special investigation, just as chemists assume the presence of a given substance in analysis and apply the specific tests for its identification.

Taking it for granted, as former experience justifies us in doing, that for this year at least, notwithstanding its fluctuation, the epidemic will not greatly exceed its present bounds in London, we propose to examine such statistics as are authentic relative to the course followed by the three previous visitations of cholera in the metropolitan districts, with the view of ascertaining whether any useful deductions can be drawn therefrom for future instruction, reserving for subsequent consideration the results affecting the country generally.

And, first, we can but regret that the available materials relating to the first epidemic period of 1832–33 are so few and so imperfect. True, in his copious and invaluable report on the cholera in 1849, Dr. FARR tantalizes us with the statement that the Board of Health—a committee specially appointed by the Privy Council—in 1831–32 collected much information, and prepared tables "showing the names of places attacked, the date of the first case, the date of the last case, the number of days' duration, the total deaths, the total recoveries, the proportion of deaths to cases, the population, the proportion of population attacked, and the proportion of deaths to population; and all the places were numbered on one of ARROWSMITH's large maps." Dr. FARR adds: "The tables and maps are now in the library of her Majesty the QUEEN. At the instance of Sir JAMES CLARK, copies have been made of these valuable documents, and are deposited in the General Register Office." Yet scarcely any use whatever is made of them in the 1849 Report beyond a few general references, which throw little light upon the course of the former epidemic. Judging from what we know of the value which Dr. FARR attaches to everything of real use in his investigations, one is led to infer that he set small store by the results arrived at by the Board of Health of 1832, and therefore that their trustworthiness is problematical. But we would suggest that these documents should be rendered more accessible to inquirers than is implied by their deposit in the Royal library or in the private archives of the Registrar-General's department; and Dr. FARR would increase the obligation due to him for his many public services if he would print the documents as addenda to one or other of his periodical reports.

As we have just said, every additional fact is of importance in the study of any law; and the statistics of cholera are not yet sufficiently numerous to admit of any observations being lost sight of, even if they be of an inferior character. Precision of diagnosis and of record were no doubt unfamiliar and very much disregarded thirty-five years ago; but then there is a good deal of improvement to be desired now; and, in fact, the majority of our statistics, excellent as they undoubtedly are, must be taken *cum grano salis*.

The disease which had broken out in the autumn of 1831 in Sunderland did not manifest itself in London until February, 1832, and the first case is stated to have happened on the night of the 7th of February, to the mate of a vessel lying in the port of London, whither she had arrived from Limerick three weeks previous to the mate's attack.* The next two cases were also seamen on board Scotch vessels lying at the "Hermitage;" and subsequently, the disease, having spread from Wapping and Limehouse along that side of the shore, crossed over the river to Rotherhithe and Bermondsey, afterwards attacking the lower parts of Lambeth, then over the river again to the lower parts of Westminster, extended along the Fleet Ditch, and thence passed into the City. The description by Mr. BOWIE, the surgeon who attended the first cases in the port, of the horrible condition of the shore neighbourhood and the filthy habits of its denizens, and the corroborative evidence of other witnesses, all pointed to the identity of the cholera track with that of typhus and other epidemics—an identity which, as a rule, is found to be sustained by renewed experience. The entire epidemic period in London extended in the first outbreak from February to November, 1832, during which time 5275 deaths from cholera occurred. After November there was a total cessation of deaths for eight months, the disease then, for the second time, breaking out on the 1st of August, and lasting till the 7th of September, 1833, causing 1454 deaths.

According to the tabular statement given by Mr. GRAINGER at page 13 of his Report to the Board of Health on Cholera in

* First Report of Metropolitan Sanitary Commission, 1847, p. 10.

1849, the total number of attacks in the two outbreaks was 14,144, and of deaths, 6729, so that 48 per cent. of the cases were fatal. Mr. GRAINGER quotes the population of London in 1832 at 1,681,641, and therefore the mortality from cholera during the forty-seven weeks of its course in the two outbreaks was at the annual rate of 4·4 deaths to every 1000 persons living. This epidemic seems to have run a very eccentric career: beginning with 14 deaths in the week ending Feb. 23rd, 1832, it increased to 279 in the week ending March 30th, and then fell rapidly to its original dimensions by the end of April; through May and the first weeks of June it was comparatively dormant, but by the end of June it displayed increased activity, and sprang up to a maximum of 445 deaths in the week ending July 27th; through August and the beginning of September it remained at a slightly reduced point of morbidity, and declined to its subsidence at the end of November. Of its reappearance the following summer Mr. GRAINGER gives no particulars, save that it lasted for nearly six weeks, and destroyed 1454 lives in the interval.

In dealing with a disease like cholera, from which in its milder types we are rarely free, it is extremely difficult to define the exact point of time at which it acquires an epidemic character, and therefore it seems needless to lay any stress upon the discrepancy between the statement of Mr. GRAINGER that "the first undoubted case of cholera in London took place on September 22nd, 1848, at Horsleydown," and the district registrars' returns of deaths from "Asiatic cholera" as early as June and July—which are confirmed indeed by the testimony of the Board of Health. The sequence of the outbreak, according to the report of the Board of Health, was from Horsleydown, eight days subsequently, to Lambeth and Chelsea, on the ninth day in Fleet-street, the tenth day on the river off Woolwich, and on the thirteenth day simultaneously in the *Dreadnought* Hospital Ship and in Spitalfields. Accepting, for lack of other guidance, the statement of Mr. GRAINGER that the first case in the great cholera epidemic of 1848–49 occurred in September, 1848, and the last in the week ending 22nd December, 1849, we have an epidemic interval of fifteen months, which was divided into two well-marked periods: the first of these extended from September, 1848, to the end of the ensuing March, causing 988* deaths in twenty-seven weeks; then came a brief two months of inactivity, until, in June, the smouldering embers blazed out in the devouring epidemic which, in the course of twenty-seven weeks, carried off 13,585 victims. We have, therefore, in the fifty-four weeks embracing the dual epidemic period a total of 14,573 deaths, which is equal to an annual rate of mortality from cholera of 6·2 deaths to every 1000 persons living.

We come now to the third great cholera invasion, which was ushered in, like its predecessors, by a number of sporadic cases, in the early part of 1853; and again we find two distinctly marked periods, with an intervening lull. The first period extended from July, 1853, to the middle of January, 1854, comprising twenty-eight weeks, during which time 875 fatal cases occurred. Dr. SUTHERLAND assigns the beginning of the second outbreak to the 5th of July, 1854, the case being one of "choleraic diarrhœa" in an infant at Westminster; on the 7th another child was killed by the disease at Chelsea; on the 8th fatal cases occurred at Rotherhithe and St. George's-in-the-East; on the 9th a sailor died on the river off Bermondsey; the next fatal cases occurred in Marylebone on the 12th; at Brixton on the 14th; in Shoreditch on the 15th; on the 16th at Greenwich, St. George (Southwark), Poplar, and Spitalfields; on the 17th at Chelsea and Holborn; on the 18th in Pancras, Bromley (Bow), and Bermondsey; on the 19th at Chelsea, Hackney, Hoxton, Limehouse, Battersea, and Bermondsey; on the 20th in Poplar, Lewisham, Lambeth, Whitechapel, and St. Olave (Southwark); and by the end of July the epidemic had shown itself in all parts of the metropolis. The epidemic attained its maximum in the second week of September, with a weekly tale of 2050 deaths, which is in remarkable parallelism with the record of cholera in 1849, both as to time of greatest mortality and as to the actual number of fatal cases. The epidemic decreased rapidly, and disappeared in December, having ranged in its second period over twenty-six weeks, and destroyed 10,690 persons during its progress. The results for the entire epidemic of 1853–4 would thus be 11,565 deaths in the fifty-four weeks, or an annual ratio of 4·5 deaths to every 1000 persons living.

Finally, we complete our analysis of the aggregate results of cholera visitations by a brief outline of the history of the epidemic now *in transitu*. Nobody, so far at least as we know, has yet ventured to define the exact point of origin of the outbreak whose power was first shown in the Eastern districts of the metropolis. An examination of the Registrar-General's Weekly Returns will show that isolated cases proved fatal in different parts of London from the commencement of the year. On the 26th of January a death from cholera occurred in St. George's-in-the-East, and subsequent cases as follows:—Islington, Feb. 7th, cholera morbus after eating fish; Hackney, April 7th, cholera forty-eight hours; Mile-end Old-town, April 28th (child), English cholera; Hackney-road, May 6th, bad case of English cholera; Bermondsey, May 11th (child), choleraic diarrhœa six hours; Stepney, May 12th, English cholera; Chelsea, May 21st (child), English cholera; Walworth, May 28th (child), Asiatic cholera one day; Bethnal-green, May 31st (child), choleraic diarrhœa twenty-four hours; Marylebone, June 1st, choleraic diarrhœa forty-eight hours; Kensington, June 2nd, English cholera; St. George, Hanover-square, June 6th, choleraic diarrhœa; Bow, June 12th (child), choleraic diarrhœa; Mile-end New-town, June 12th (child), choleraic diarrhœa seven days; Newington, June 13th, cholera three days; Walworth, June 21st (child), cholera four days; Bethnal-green, June 21st, cholera; Islington, June 22nd, English cholera; St. James, Westminster, June 23th, two cases of English cholera. In the week ending June 30th, six deaths from cholera were registered; and amongst these were two cases of the most serious character: Bromley (Bow), June 27th, a labourer and his wife, cholera Asiatica fifteen and twelve hours.

From this time the number of fatal cases of the most virulent type of cholera rapidly increased; and in the week ending the 14th of July, 32 deaths were registered in London, of which number 20 occurred in the Eastern districts. In the next week (the fourth week of the epidemic) the cholera deaths sprang up to 346, the Eastern districts accounting for 308 of them; and in the sixth week from its commencement the maximum of the epidemic ("the wish is father to the thought" in thus venturing to speak of what may yet prove but another instance of *reculer pour mieux sauter*) was attained with 1053 deaths, 916 of them happening in the Eastern districts. From this point there was the rapid decline in the succeeding three weeks which is a characteristic of epidemics; but since then a check in the downward course has been apparent, and the present progress of the disease is erratic. Altogether 4902 persons have died from cholera during its fifteen weeks' presence as an epidemic amongst us, which is equal to an annual rate of mortality of 5·6 deaths to every 1000 persons living.

Now let us bring the results which we have given relative to the lethality of each of the four cholera epidemics into a comparative view.

* Board of Health Report on Cholera, 1848–49, p. 12.

Cholera years.	Duration of epidemic.	Deaths from cholera.	Annual rate of mortality from cholera to 1000 persons living.
1832—33	47 weeks	6,729	4·4
1848—49	54 ,,	14,573	6·2
1853—54	54 ,,	11,565	4·5
1866	15 ,,	4,902	5·6

By reducing the death-rate to a uniform ratio in point of time in each case, we are enabled to see the degree of intensity of the fatality of the disease in its successive visitations; and the conclusion thus far is certainly adverse to the comfortable theory that, although cholera exhibits in individuals no abatement of its original virulence, yet that, on the whole, its fatality has steadily declined. But that any inference deducible from facts depends to a great extent upon the way they are looked at, will be evident if we take another view of this same subject of the relative fatality of cholera. For instance, the calculations we have given in the foregoing table embrace the whole period during which each epidemic lasted, and they therefore include the lighter concluding short outbreak of 1833, as well as the extended premonitory outbreaks of 1848 and 1853. At present our experience of the epidemic of 1866 is limited to so short a space of time that it is necessary to try another basis of comparison, such as the subjoined table presents.

Years.	Duration.	Deaths from cholera.	Ratio of deaths in 18 weeks to 1000 persons living.
1832	19 weeks	3,494	2·1
1849	do.	13,381	5·9
1854	do.	10,124	4·0
1866	do.	4,911	1·6

The difference between the two series of results is apparent. All that the first table shows is, that if each of the outbreaks had been of uniform intensity, and had each lasted for one year, the relative fatality would be expressed in order of date by the ratio of 4·4, 6·2, 4·5, 5·6. In two instances the hypothesis holds good; and it will be seen that in both tables the epidemics of 1848–49 and 1853–54 have a relative fatality differing little from the ratio of 6·2 to 4·5, which is nearly as 10 to 7.

The second table gives perhaps as good an approximative test of the relative fatality of cholera in its several visitations as can readily be supplied. We have taken the same number of corresponding weeks in the four years, embracing in each year the period when the epidemic had attained its most deadly malignity and had begun to abate. Still, however, in consequence of the diverging weekly course of the disease in each of the four years, we can only get an approximation to the truth: thus in 1849 and 1854 the maximum death-point was attained in the same week of both years, the exact number of deaths being almost the same; and this further satisfies us in regarding the ratio of 10 to 7 as fairly representing the reduced fatality of the epidemic of 1854 as compared with its predecessor of 1849. The epidemics of 1833 and 1866 have also a similarity such as we have just noticed with regard to the two intermediate epochs: in 1833, the highest mortality was attained in the week ending July 27th, and the culminating point of the present epidemic was reached in the week ending August 4th, the subsequent course being in both instances erratic, instead of steadily downwards. All things considered, we should endorse the doctrine of diminished fatality of cholera so far as we can form any judgment of the eventualities of its latest development; not losing sight, however, of the possibility of the recent outbreak proving only premonitory of a renewal in the ensuing year.

For the convenience of those who have not means of access to the records of the past statistical history of cholera we subjoin a table showing in a comparative form the weekly course of the several epidemics, so far as we can gather them from official sources, adding by the way, as a saving clause, the remark, that if anybody should discover a discrepancy between our results and any which they may have obtained otherwise, we must throw the burden of proof so far as regards accuracy upon the public departments whose figures we have adopted.

Weeks.	First Epidemic.*		Second Epidemic.†		Third Epidemic.‡		Fourth Epidemic §
	1832.	1833.	1848.	1849.	1853.	1854.	1866.
1st week	...	...	...	61	...	2	...
2nd ,,	...	...	...	94	...	2	...
3rd ,,	...	...	...	62	...	1	...
4th ,,	...	...	...	45	...	...	...
5th ,,	...	...	...	37	...	1	...
6th ,,	...	...	...	55	...	1	...
7th ,,	...	...	...	49	...	...	...
8th ,,	14	...	...	40	...	...	...
9th ,,	57	...	...	35	...	...	...
10th ,,	139	...	...	15	...	...	...
11th ,,	195	...	...	9	...	...	...
12th ,,	225	...	...	10	...	...	...
13th ,,	279	...	...	4	...	...	...
14th ,,	198	...	...	5	...	...	...
15th ,,	94	...	...	2	...	2	...
16th ,,	34	...	...	1	...	2	...
17th ,,	27	...	...	1	...	...	2
18th ,,	20	...	...	4	...	...	1
19th ,,	12	...	...	3	...	...	2
20th ,,	16	...	...	1	...	2	1
21st ,,	7	...	...	5	...	...	2
22nd ,,	17	...	...	9	...	2	2
23rd ,,	13	...	...	22	...	1	3
24th ,,	15	...	...	42	...	1	3
25th ,,	34	...	...	49	3	1	1
26th ,,	116	...	...	124	...	...	6
27th ,,	99	...	...	152	...	1	14
28th ,,	239	...	...	339	3	5	32
29th ,,	394	...	...	678	6	26	346
30th ,,	445	...	...	783	9	133	904
31st ,,	299	}	...	926	4	399	1053
32nd ,,	190		...	823	19	644	781
33rd ,,	234	} 1454	...	1230	10	729	455
34th ,,	325		...	1272	18	847	265
35th ,,	350		...	1663	16	1287	198
36th ,,	309	}	...	2026	7	2050	157
37th ,,	144	...	...	1682	16	1549	182
38th ,,	147	...	...	839	29	1284	150
39th ,,	43	...	...	434	47	754	177
40th ,,	81	...	13	288	66	411	182
41st ,,	150	...	30	110	45	249	...
42nd ,,	37	...	45	41	83	163	...
43rd ,,	61	...	34	25	99	66	...
44th ,,	48	...	65	11	102	31	...
45th ,,	}	...	62	6	98	23	...
46th ,,	} 13	...	54	8	72	12	...
47th ,,	}	...	34	2	46	8	...
48th ,,	}	...	20	1	28	7	...
49th ,,	...	...	21	...	13	5	...
50th ,,	...	...	29	1	11	2	...
51st ,,	...	...	31	1	13	3	...
52nd ,,	...	...	30	...	10	2	...
Omitted	155						

* Mr. Grainger's Report to the Board of Health on Cholera, 1848-49.
† Registrar-General's Cholera Report, 1849, p. clxxiv.
‡ Registrar-General's Weekly Returns, 1853-54.
§ Registrar-General's Weekly Returns, 1866.

We have purposely abstained from including diarrhœa in this summary view of cholera mortality, for the reason that the form of that disease which is allied with cholera is classified with it in the returns; and if it were thought necessary to include ordinary diarrhœa in any investigations relating to cholera, there would seem to be no reason why all other forms of intestinal disease should not be included also.

Thus far we have confined ourselves to the general results of the four epidemics over the entire metropolis, without reference to their varying characteristics as affected by particular localities and the sanitary condition of the people, which will therefore form the subject of future consideration.

REFORM, like charity, should begin at home. It is gratifying to observe that the Social Science Congress has at last bethought itself that its own system is far from perfect, and that before it can hope to succeed in its grand crusade against the evils that infest society it must have a better furnished armoury, a more regular organization, and a more systematic and definite line of tactics. Such was the virtual, if not indeed the direct, issue to which the introductory remarks of Lord SHAFTESBURY pointed. The aims of the Congress had on previous occasions been too scattered as well as too ambitious. There was a certain raw intrepidity with which young volunteer reformers ran full tilt against old-established abuses, the result of the encounter being generally to leave the abuse standing as it was, and the knight-errant of social reform presenting a rueful spectacle of discomfiture. But if Lord SHAFTESBURY'S precept be carried out into practice, these Quixotic exhibitions will no longer be witnessed; and, however the satirist may in future find his material lessened by the soberer and more common-sense character of the Congress, the cause of social reform will undoubtedly be the gainer, and its ranks will be reinforced by many efficient recruits who have hitherto been repelled by the merely ludicrous aspects of the service.

Another most consolatory feature of Lord SHAFTESBURY'S address was the persistency and force with which he urged the importance of sanitary amelioration. The maxim that cleanliness is next to godliness comes with all the greater force from a lecturer whose reverential spirit is so deep, and whose simple and solid piety no one can impugn. When such a sincere religionist as he can illustrate the futility of preaching Christianity or even morality to communities sunk in misery and squalor, there is no further need for dwelling on the paramount claims of sanitary legislation. The wretched toiler in the brickfield, whom tender years and, in many cases, gentler sex should have exempted from such brutish employment, must receive immediate attention with a view to legislative interference in his, or more truly her, behalf. The law which professes to prevent the scandal of climbing-boys must be rigorously enforced—must cease to be the dead letter it has in so many instances become, if the spectacle of children dwarfed in soul and body, and afflicted with moral as well as physical decrepitude, is no longer to rebuke our humanity. The dwellings in which our labouring poor are "accommodated" are destructive alike of the soul and body of their inmates, and in every condition of moral or physical well-being they are worse than the prisons which they serve to fill. The crime of infanticide is now as common in Christian London as it was in pagan Rome when, according to JUVENAL, every street had its CLYTEMNESTRA. Prostitution still levies its hideous tax on the girlhood of our great cities, and for every maiden that is yearly devoured by this Minotaur a youth also undergoes a moral sacrifice. Till abuses like these are remedied, of what avail is it to promote the enjoyments or to increase the intellectual riches of the community? And how far does a Social Science Congress, which neglects the unlovelier but more imperious problems, fulfil its function or justify its existence?

"I do not wish," said Lord SHAFTESBURY, with a directness that had all the force of a rebuke—"I do not wish to see our gatherings converted into parliaments, and we have enough on hand to demand and to occupy the activity of at least two-thirds of a generation." This narrowing of the field of the social science organization was suggested by no insensibility to the vastness of its extent, or to the multiplicity of its problems. Such insensibility would have ill become the character of a nobleman who, in the graceful compliment of SHEIL, had "made humanity one of SHAFTESBURY'S 'Characteristics.'" Conservation of force for the surmounting of the main obstacles to improvement was the tactics with which, like a good strategist, he advised the officers of the Social Science army to conduct their operations. In encountering the crime of infanticide, for instance, there is a strong temptation to extend and thereby to weaken the line of attack. The key to its position is the state of society, which renders marriage such an impracticable and distant consummation. But the causes which produce this state of society are so manifold that legislation is in constant danger of mistaking an exceptional cause for a persistent one, and thereby of expending much valuable energy on a condition which really contributes little to the production of the evil in question. The throwing open of many avenues to emolument which are now closed against all but political favourites, or are only made accessible by adherence to a particular political party, would add greatly to the means by which young professional men could acquire the worldly right to marry. A more widely diffused feeling of social responsibility would impose on the passions of men a restraint which does not at present exist in sufficient force to be effective; but this feeling can only be the outgrowth of education and moral refinement—the tardy result of years of self-discipline and of a gradually elevated standard of conduct. For the bringing about of this consummation the Social Science Congress itself will prove the most effective engine, but only in the ratio in which it practically observes the wise injunctions of Lord SHAFTESBURY, and remembers that benevolent impulses are only of profit to society when they are under the guidance of reason and common sense.

The address of Dr. FARR, as President of the Health Section, was replete with statistical information, as might have been expected. We publish elsewhere a condensed report of this address, which, in its complete form, embraced a review of the comparative vitality of the principal European States.

THE Building Committee of Addenbrooke's Hospital, Cambridge, in presenting their final report to the Quarterly Court on Monday last, congratulated the governors on the completion of the works, and on the possession of a building equal to any provincial hospital in the kingdom for novelty and beauty of elevation and convenience of internal arrangements. The hospital, which has been nearly rebuilt, was reopened some months ago for the reception of patients.

Medical Annotations.

"Ne quid nimis."

ANATOMICAL PREPARATIONS AT THE COLLEGE OF SURGEONS.

WE are always glad to chronicle any advance in the educational tests of the profession. Not the least of the improvements of late years was the introduction of examinations from the dissected subject at the College of Surgeons; but it has been found that though it was possible, thanks to the labours of the College prosectors, to provide on nearly all occasions the majority of the ordinary dissections, yet that both time and opportunity failed for the production of those more elaborate preparations which every student versed in anatomy should be familiar with. To supply this want has been the aim of Mr. Partridge, the President of the College, for some time past, and he has now, we believe, succeeded, with the assistance of Mr. Moseley (who has been specially retained for the purpose by the College authorities), in producing a series of dissections which, being preserved in spirit, will be available at forthcoming examinations.

Students have a righteous horror of "pickles," by which they understand discoloured and confused preparations which have been sometimes used in the examinations when the supply of fresh subjects has fallen short, and generally with very fatal results to the candidates. The preparations of which we are speaking, however, in no respect resemble these, since they have been made from perfectly fresh specimens, most thoroughly and beautifully dissected and carefully preserved, so as to retain their colour to an extent which will at once enable the student to recognise the several tissues. The mode of displaying the preparations is one which we commend to teachers of anatomy, and which we have little doubt will be followed by those who are anxious for the success of their pupils. It is to fill an ordinary brown pan with plaster of Paris so as to form a convenient bed for the preparation, which is then covered with spirit, a sheet of plate-glass being placed over all, so that the preparation may be examined without liability to damage. By this method the parts are seen without that distortion which is inseparable from suspension in the ordinary preparation-jars, and at the same time, the preparation being horizontal, the several structures retain their relations as in the dissecting-room.

In this manner it will be possible to have always at hand various sections of different parts of the body, and especially of the head, by which the deeper structures may be displayed. A superficial knowledge of anatomy will thus be rapidly detected, and the work of the diligent dissector appreciated. At the same time we would warn the President and his prosector against too great cunning in their art, since it is quite possible to make a section of some parts of the body which shall be unrecognisable even by good anatomists. We remember to have seen on one occasion in the College library three teachers of anatomy disagree, and all be in error, respecting a structure in one of the plates of Pirogoff's great work, taken from sections of frozen bodies, and which proved on reference to be the *vena cava superior!*

AN ILL-USED QUALIFICATION.

A COMPLAINT has reached us which we cannot but regard as one which deserves notice and redress. It is that gentlemen who, being members of a University, have proceeded to take the degree of Master in Surgery, find that they are in reality shut out from public appointments for want of being members of one of the Colleges of Surgeons of the United Kingdom. When the Colleges of Surgeons were the only bodies which could confer the right to practise surgery, it was fitting that public institutions should require their officers to be members of these corporations; but now that the Universities confer an equally good if not a better claim to be a master of the art of surgery, it is surely time that an alteration in the laws affecting such appointments should be made. So also with regard to the Apothecaries' Hall. Why is it necessary nowadays that a resident medical officer of an hospital or dispensary should be an apothecary? A Doctor of Medicine of one of the Universities will probably prove an equally able medical officer, and have as good a knowledge of drugs as has the licentiate of the Hall, and it is hard therefore that this qualification should be a *sine qud non*.

Our remarks apply more to the graduates of the northern Universities than to London students. Here a student generally takes the qualifications of the College of Surgeons and Apothecaries' Hall, even if he means to graduate at the University of London; but the same hardship extends to that excellent qualification, the Licentiateship of the College of Physicians, which is rarely recognised as an equivalent medical diploma. The fact is, that few of our public institutions have taken the trouble to revise their rules since the passing of the Medical Registration Act of 1858, and thus the old qualifications are insisted upon, with the occasional addition of a certificate of registration.

The Mastership in Surgery ought to take rank with the Fellowship rather than the Membership of the Colleges of Surgeons; and if so the rules affecting the higher hospital appointments will require modification, since the possession of the F.R.C.S. is now essential for holding a surgical post at most of the metropolitan hospitals. It has been argued that a graduate in medicine is merely a "doctor," and becomes a "physician" only when he joins a College of Physicians; but the same cannot be said of a Master in Surgery, who must perforce be a "surgeon."

LOCAL ABUSES.

IT is with satisfaction we note a few words of considerable significance which Mr. Hardy addressed to a civic audience at a banquet given this week to the Lord Mayor by the members of the Mansion-house Cholera Committee. The President of the Poor-law Board was a guest by virtue of his official relation to the various official local boards who had to meet the cholera epidemic. This duty they have performed badly enough, under immense pressure, and supplemented by large voluntary aid. When the Lord Mayor spoke of the neglected condition of the poor which had been revealed to his astonished vision by his few visits in the East of London, and the shockingly neglected state of the parishes which the epidemic has chiefly visited, Mr. Hardy significantly and truly replied, that a great part of the evils were to be traced to landlords who did not do their duty; a great part to "the excessive love of what was called local government as contradistinguished from central authority." This was a very important statement coming from Mr. Hardy in the presence of that particular audience whom he addressed, who have had in the past a sort of fatuous veneration for the words "local self-government," and for their sake have been content to tolerate the most shocking kinds of social abuse and neglect. Mr. Hardy's experience of his difficulties at Bethnal-green, Lambeth, Hackney, and Petty France, and the insulting reception which the guardians of Clerkenwell, St. Pancras, and Holborn have given to two of his recent circulars, must have fully convinced him that if the President of the Poor-law Board is to be responsible for the good management of the workhouses and infirmaries, he must have better tools to work with and full power to direct them. It is by no means uncommon for the guardians to move that a communication from the Poor-law Board be "received *pro formâ* and the next business proceeded with;" or that it be not entered in the minutes. The Paddington guardians have declined to produce to the vestry the last communication from

the Poor-law Board touching the recent inquiry. Altogether Mr. Hardy has before him a task of the utmost difficulty in attempting to reconcile any sort of guardian rule with good government; but that it must be greatly modified in the future, if it be allowed to exist at all as such, is, we may take it, clear to the President as to others who have watched the behaviour of the boards for the last twelve months. The revelations at Lambeth are as bad as anything disclosed twelve months since; and the surprising incompetency of "guardians" of the sick poor who could at such a time as this appoint as deputy medical officer a pauper of more than seventy years of age, is of itself a warrant for an alteration in the existing system. The secrets of that house have, however, not yet all been told: a public inquiry is a matter of necessity, and we earnestly hope that Mr. Hardy will not wait to be pressed to order one. We should be glad to see the Poor-law Board assume its proper initiation.

DAILY RETURNS OF CHOLERA.

GREAT dissatisfaction is expressed at the discontinuance of the diurnal bulletins which the Registrar-General has issued during the last two months, and remonstrances have been made to the Government on the part of the Mansion-house Committee, who say they cannot carry on their operations satisfactorily without the aid of the returns. It seems to us that if any remonstrance were necessary it should have taken the form of a courteous request to the Registrar-General to continue the returns rather than of a complaint to the Government who, so far as we know, are not entitled to the credit of their publication in the first instance. The Registrar-General and Dr. Farr have a great many other very onerous and important duties to perform besides the exceptional task of recording the facts relating to cholera, and, judging them according to their well-earned reputation acquired in a long service of the public, we are loth to believe that anything short of necessity has caused the suspension of the daily returns. Government clerks are not made of tougher material than other men, and possibly the Registrar-General may be of opinion that in imposing upon his staff extra duty for two months without additional pay he has done as much as can be reasonably expected of his department. That these daily returns are extremely valuable is not to be denied; but there are always two sides to a question, and if the public wants a mass of information got out at high pressure it ought to take care that the machinery is adequate for its work. We suspect that something of this sort is at the bottom of the daily return discontinuance; but we hope that in such case the Government will supply the Registrar-General with any assistance necessary to enable him to resume the publication of the returns as soon as possible.

COLLEGE REFORM.

WE announced a short time since the important resolution which was carried by the Council, that no examiner should hold office longer than ten years. There are now three examiners who have held office for a longer term than this. They are Mr. South, Mr. Hawkins, and Mr. Luke, who have held office respectively for eighteen, seventeen, and fifteen years. Will the Council who have passed this resolution now give effect to it, or will they quietly see it rendered nugatory by the continued occupation of the examiner's chair by gentlemen who, without the least reflection on their personal merits be it said, ought to give place to men equally fitted, and who have been too long debarred from taking their turn of official duty by the old *régime*. The most graceful proceeding would, of course, be resignation. If this should occur we should all feel that these gentlemen have taken an honourable and patriotic course. They will have served the College and themselves. The other alternative is disagreeable; but it is no secret that members of the Council, whose position and personal character put their motives entirely beyond question, will be prepared to put this resolution into force and to give it the value of action. It is not desirable that personal considerations should enter into this question. We signalise no one of these gentlemen. We intend and imply no slur upon the ability, the attainments, the business capacity, or the conduct of any of them. We object to the perpetuity of tenure by any individual however distinguished. It is contrary to the interests of science, to the good working of the College as an educational institute, to the common rights of the fellows and members, and the principles of the charter incorporating the Society. There can be no doubt that this protest will be followed by action in the Council, which will be fully borne out by the feeling of the whole body of members. We should see with satisfaction that the general decision already arrived at and formally enunciated by the resolution to which we refer was accepted with dignity and cordiality by the gentlemen whom it affects, and who may well bow to the decision of their fellows, backed by the almost unanimous opinion of the profession, in a matter as to which, even if they entertain different views, they must remember that they are not the best judges by reason of their own immediate and personal concern, and necessarily powerful bias.

SMOKING IN RAILWAY CARRIAGES.

"THE fragrant weed" is in very bad odour just at present with many inmates of railway carriages. Smokers, it seems, will persist in their peculiar indulgence, the most stringent regulations notwithstanding. Railway directors, station masters, and guards are impotent to prevent them, and the tobacco vapour rises before the helpless official mind like the cloud that gradually ascended to gigantic proportions from the fisherman's casket in the Arabian Nights. The remedy, to our thinking, is sufficiently obvious. Why not, on all lines of railway, have smoking-carriages, as Frenchmen, Belgians, Germans, and Italians have? No complaints of illegal smoking in railway carriages are ever found in foreign journals. Besides, the imposition of regulations which are only made to be broken—as the prohibition of railway smoking is with us—has a demoralising effect, not only on the violators of the rule, but on the officials who connive at its violation. It accustoms both parties to treat regulations with indifference. With what consistency can a guard fine for smoking a traveller who has witnessed the practice persisted in with impunity on the same line of railway? The guard might just as well be punished for breach of duty on every occasion of his conniving at the practice. Therefore, we say, let us have smoking-carriages on all lines; and the rude indulgence in a habit which has all the ladies against it will cease to shed a sinister light on our good-breeding—*ex fumo dare lucem!*

PORTRAITS OF SKIN DISEASES.

IN the present day there is little excuse for the managers of our medical schools if they fail to provide their students with facilities for studying the diseases to which the human frame is liable, since both models and drawings are so much more reasonable in price than they were in former years. We cannot expect every museum to possess wax-work models of anatomical subjects and of skin diseases; but every hospital museum or library should be provided with the capital lithographic illustrations of these disorders issued by the New Sydenham Society or (on a smaller scale) by Dr. Squire. In our experience, plates if carefully hidden away in portfolios are but little sought after, and are frequently even ignored altogether by the student. What is wanted in our medical libraries is as easy reference to the plates as there would be to the models in a museum; and this could be managed with comparatively little expense by the use of glazed frames to contain them. Many of our dissecting rooms are

already provided with capital illustrations of anatomy mounted in this manner, and but a little extension of the method is requisite.

Most of our readers are, no doubt, acquainted with the very accurate illustrations of skin diseases published by the New Sydenham Society, and which now number seventeen plates, illustrating twenty-three different subjects. The last fasciculus, that for the current year, is only now being issued to the subscribers; but, having seen early impressions, we can pronounce them equal to any which have preceded them. We are glad to hear that the Council of the Society has in preparation a short letterpress guide to these plates, which cannot fail to enhance their value, more especially to the student. It is not so widely known as it should be that the Society's plates are now entirely from original drawings made especially for them, and that they thus form an index to disease of the type common to this country, instead of being reproductions of some of those extraordinary forms met with in Vienna and other great continental cities. The cost of the plates alone is so small that even if the library funds will not admit of the annual subscription, these alone may be easily provided.

The atlas of coloured lithographs just issued by Dr. Squire is a reproduction of some of his well-known photographs of skin diseases, and is beautifully executed; but being on a small scale, the plates are more fitted for the private study of the student than for the walls of the library or museum. Their price will commend them to those who could not secure examples of their photographic predecessors.

COMPETITIVE PHILANTHROPY.

IN the good city of Worcester a competition is at present being carried on in philanthropy—Dr. Woodward and Mr. Rogers on one side, and Dr. Maxwell on the other: the two former gentlemen have just established a provident dispensary in the Cornmarket, where any working man for a small weekly subscription, and an entrance-fee at the beginning of his sickness, may receive the medical advice and medicine requisite for his illness, or that of his wife or family.

Dr. Maxwell, of Springfield Lodge, having determined to outdo his brethren in philanthropy, has issued a large placard announcing the establishment by him of a private Medical Samaritan Institution, in which he proposes to *give* his advice, and, moreover, supply medicine gratuitously, to 10 poor patients each month, or 120 annually, on each of five days a week at noon. Dr. Maxwell very properly cautions those who apply to him for his medical assistance "to keep on the gravel walk, and not to let their children injure the shrubs or flowers."

One of the Worcestershire papers has made some humorous remarks on this amiable contest, and which would seem to indicate that the writer was not fully impressed with the extent of the philanthropy which three of his fellow-townsmen have exhibited.

KINGSTON-ON-THAMES.

KINGSTON, like many other county towns, is the victim of an *imperium in imperio*. It possesses a corporation of singular activity and considerable "local" power, with what results *quoad* sanitary matters our readers will be able to judge for themselves. The borough being by no means free from plague-spots, when cholera made its appearance the Mayor and an energetic alderman, named Gould, seem to have summoned Dr. Price Jones to their aid as medical officer, and to have appointed an additional inspector of nuisances. Consequent on Dr. Jones's careful inspection, the condition of the town was improved, houses were cleansed and purified, privies and waterclosets disinfected; and the frightened corporation was loud in its praise of the energy which had been displayed. Now, however, when the cholera is abated, the valiant aldermen are determined to return to their wallowing in the mire, and have decreed to dismiss Dr. Jones and to do away with the additional inspector.

The parish of Kingston, which includes a very large district, contrasts favourably with the borough in its treatment of those medical men who have aided them in their difficulties. A Mr. Phillips, it is true, objected to paying the medical men for their labour, and said "he had never dreamed that the medical men would charge for anything but extra medicine supplied. If they were to be paid extra for the little extra labour they had incurred, he should propose a small gratuity of two guineas each!" This liberal proposal, which was received with "much laughter," was happily overruled, and the following resolution, which may well serve as a model for other parishes, was agreed to: "That a letter be sent to each of the medical officers in charge of a district under the late proceedings regarding cholera and diarrhœa, requesting them to send in a statement of what they consider a fair remuneration for their extra duties performed in consequence of the orders of the Privy Council, and at the same time stating that the Board is disposed to deal liberally with such extra services, and that from this day such extra services shall cease."

MEDICAL MARTYROLOGY.

A SAD list of physicians who have fallen victims to their devotion while succouring the sufferers from the reigning epidemic comes from the continent. At Leipsic, Dr. G. Gunther, chief of the surgical clinique of the hospital of that city, has succumbed to cholera. At Breslau, Dr. Klopsch, who has acquired reputation by his writings on orthopædy, has been carried off by the same malady. Vienna deplores the loss of two of its most distinguished practitioners—M. le Baron Wattmann-Beauliere, surgeon to the Emperor, and Dr. Franz Liharzik, author of a remarkable work upon Development. English professional men will remember the series of models and diagrams by which the views of the latter were illustrated in the Great Exhibition of 1862.

Finally, in the short campaign of the last war, no less than *eleven* Prussian physicians died from cholera.

A MOST important adjunct to the soldier's outfit has been recently proposed by a Belgian gentleman, M. Heeremans, who has produced a waistbelt for soldiers which seems to promise to be of great service if worn generally in the army. Upon the termination of an engagement or a battle, the situation of those who have suffered in the fray should be considered. For want of prompt attention or dressing, the wounded often run great risks of gangrene, lying as they do exposed to the heat or cold. This belt buckles on like an ordinary one. It is about four feet long and three inches wide. It is folded outside so as to receive a bandage of the same length as the belt. Near the buckle are two small pockets made of india-rubber enclosing a second bandage, some lint, plaster, pins, &c. The soldier wears it on his trousers, and the whole weighs only about three ounces. In many cases the soldier will be able to dress his own wounds, whilst in other cases he will be attended to by his comrades. Once the first dressing applied, the belt will serve as a bandage for the leg or the body, or a scarf for the arm. This belt, of an infinitesimal weight, and which costs only one franc, can in no way hinder the movements of the soldier, and, in fact, would be a kind of support to him.

DR. ROBERTS, the medical officer of health for Leeds, has issued proceedings, under the authority of the Town Council, against one of the inhabitants for keeping pigs in such close proximity to dwelling-houses as to cause a nuisance. Evidence was adduced to show that the piggery in question did amount to a nuisance. The defence was remarkable for ingenuity, but failed to produce an effect upon the magistrate, who ordered

the pigs to be removed within seven days. Notice of appeal was given. The attorney for the defence said the statement "that pigs were a nuisance was a theoretical deduction, and not a practical conclusion." Consequently three neighbours were called to affirm that "neither themselves nor their families had ever been injuriously affected by the pigs, or heard of any complaints concerning them." It is due to Dr. Roberts to state that during the time he has been medical officer for the township of Leeds he has fulfilled his duties in a manner which entitles him to commendation.

IN continuation of the scheme of investigation in process of being carried out for the Privy Council, under the direction of Mr. Simon, concerning the epidemic of cholera now declining in the metropolis, and to which we referred in a former number, Mr. J. Netten Radcliffe has been instructed to prepare a report on the origin and extension of the outbreak.

AT the annual meeting of the Herefordshire Medical Association held on the 19th ult., the following resolution was carried unanimously:—"That the discussion by members of the profession of medical subjects (with reference to the treatment of disease) in the public newspapers is much to be regretted; it is futile for any useful result, and seldom fails to compromise the dignity of true science." This example is well worthy of being followed by other societies. The "eminent physicians" who write in the public newspapers are often "eminent" in nothing else.

DR. BURROWS, Dr. Sieveking, and Dr. Jenner have been elected honorary members of the Metropolitan Poor-law Medical Officers' Association.

SALTBURN-BY-THE-SEA.

OUR notice of the sanitary condition of Saltburn-by-the-Sea in THE LANCET of Sept. 29th has given rise to further communications from residents, who declare our statements to be perfectly true, and express their thanks to us for calling public attention to their wants. We have also received a letter from the secretary of the "Saltburn Improvement Company," in which he disputes the accuracy of those statements. That the article in question was written in perfectly good faith and on information of the most reliable character is sufficiently shown by the following petition to the directors of the Improvement Company, received by them, we believe, at the same meeting at which they directed their secretary to write to us:—

"We, the undersigned tradesmen and householders of Saltburn, beg respectfully to draw your attention to the following important matters, which we regard with considerable concern as affecting the health and comfort of the inhabitants, and the effect of the same upon the progress and attractiveness of the place.

"Foremost, we would submit that immediate steps should be taken for securing a supply of pure water. Latterly that which we have had to use has been quite unsuitable for domestic purposes, and we have been in constant dread lest, from its impurity through drainage, cholera should be induced in our midst.

"Next, we consider it highly necessary that the drainage should be made more effective and complete. Fever has prevailed more or less to a considerable extent through the past year, and we fear that this is traceable to a great extent to the drainage system.

"We think it also highly important that some regard should be paid to the laying out of the place as respects the area of space to each house. Should the precedent be followed, as shown in the back premises of Balmoral-terrace, Dundas-street, and Cleveland-street, instead of Saltburn being distinguished for its healthiness and salubrity, we fear it will be quite the contrary, and be known as perpetuating in an aggravated form the worst features of our crowded cities. We have had representations made to us by visitors of their astonishment and sorrow at the want of necessary sanitary measures, and unless remedies be applied, and that soon, we are apprehensive of disastrous consequences. Expression of this feeling, given by very many, is found in THE LANCET of last week, to which, no doubt, your attention will have been drawn.

"Wishful to further your endeavours to raise the place to the highest rank in every essential of health and pleasure, we are prompted to lay these statements before you, and begging they may have your favourable consideration,

"Your memorialists," &c.

[Signed by seventy-eight of the Heads of Families in Saltburn.]

We need scarcely add that whilst we earnestly desire at no remote period to learn that the grievances of which the memorialists complain have been removed, we shall be most happy to open our columns to the testimony of the company showing that Saltburn-by-the-Sea is free from the alleged sanitary defects.

THE CHORLTON PAUPER HOSPITAL.

SOME twelve months since, we noticed in the columns of this journal a remarkable phenomenon in Poor-law administration. The guardians of Chorlton-on-Medlock, a union which includes twelve townships in the neighbourhood, and a part of the city, of Manchester, had determined to reorganise the hospital department of their workhouse in such a manner as to place the treatment of their sick on a level with the system which obtains generally in the voluntary hospitals. We confess that the details seemed to us almost too good to be true; but we had them on good authority, and we have now the satisfaction of announcing that this projected reform has become an accomplished fact. On Friday, the 5th instant, the guardians of Chorlton inaugurated their new hospital by a dinner, which was given in an (as yet) unfurnished ward of the building. The structure is nearly completed, and is already occupied in part by patients; and from the report of one of our Commissioners, who was present at the opening ceremony, we have no hesitation in saying that the most sanguine expectations of Poor-law reformers have been realised, and that to the Chorlton guardians belongs the honour of having set an example, in the organization of arrangements for the treatment of "in-door" sick paupers, which the whole kingdom may, and indeed must, follow.

The Chorlton Workhouse is a large one; it contains about 1000 inmates, besides the 480 "sick" for whom the new hospital has been provided. It stands on a large piece of ground at Withington, about five miles from Manchester, in the midst of a fine open country. The hospital is entirely separated from the body of the house, and its general form may be shortly described as follows:—Five parallel blocks, or "pavilions," 100 feet distant from each other, run out at right angles from a connecting corridor with open arches, the interior of which serves as a covered, and its top as an open-air, promenade for convalescents. Each pavilion consists of three stories; and each story is occupied by one noble ward 124 ft. long, 24 ft. broad, and about 14 ft. 6 in. high, affording an allowance of 1350 cubic feet and 93 superficial feet for each of its thirty-two beds. At the external or free end of each ward there are excellent and commodious watercloseta and bathrooms. At the other end are placed a small sick kitchen, a store-room, and a nurse's room. *Every ward is provided with these adjuncts.* Besides the liberal allowance of space to the patients, the subsidiary ventilation is very completely provided for: each window is triple sashed, the upper portion pivoted and provided with a piece of perforated zinc, which forms a permanent opening, even when the window is otherwise closed. Large glass louvres above the door of the ward provide for a constant ingress of fresh air from the wide staircase, which is freely ventilated from the open air. Gas jets near the ceiling aid in removing foul air. The result of the

arrangements is the provision of a perfectly fresh and sweet atmosphere for the patients; while three large fireplaces provide ample means of necessary warmth. Besides the special sick kitchens, provided for the momentary emergencies of each ward, a noble hospital kitchen, for the general service of the sick department, is in course of erection between the hospital and the body of the house; and an "administrative" block, with dwellings for the medical and nursing staff, will shortly be built in a similar situation.

The nursing staff at present consists of twenty-five paid and trained nurses, under the superintendence of two of the ladies from the All Saints Home, Margaret-street—a nursing society which has made itself so widely known for first-rate efficiency in every way, that any compliments on the management at Chorlton would be superfluous. Only the other day we told the story of the heroism with which these ladies encountered and overcame the panic which was caused by the influx into the hospital of a large number of typhus cases. We now wish to call attention to the special value of the humanising influence which they exert, by their careful attention to neatness and beauty of arrangement in the wards. With severe but intelligent economy, the guardians have provided a solid and spacious building, but have left the walls of the wards merely whitewashed for the present; but the intrinsically blank and dismal appearance of large white surfaces is relieved by the sight of flowering plants on the tables and a few pictures on the walls; and in one ward, which contains children, a cheerful group of little convalescents might be found seated in a circle round the good "sister," and singing "Slap bang," or some such nonsense, with unmistakable enthusiasm. So that even in the present unfinished state of things, the idea of bareness or cheerlessness never enters the mind in looking at the wards which, so far, are occupied.

There are two resident medical officers and one consulting surgeon. Dr. Woodcock, who, we believe, is the senior resident officer, very kindly showed our Commissioner all the medical arrangements of the place, and it is pleasant to observe that at Chorlton there is every disposition on the part of the authorities to treat medical officers with that deference and gentlemanly consideration which the boards of our large hospitals show to their medical staff. There is no bullying or browbeating, such as falls to the share of many a luckless parish doctor in less happy regions, and there can be no doubt that the medical officers of Chorlton well repay every kindness they receive by the earnestness and intelligence with which they throw themselves into their work. It is needless to say that they are not hampered by the miserable drudgery of dispensing work; all this is done by a dispenser and a pupil, and the dispensary itself is thoroughly well arranged and stocked. In short, the Chorlton pauper hospital, in excellence of structure and internal arrangement, stands not simply alongside, but *decidedly in advance, of every hospital as yet existing in this country;* and although the medical staff is certainly not larger than just suffices, there is every appearance of efficiency in the medical service. The nursing staff also is rapidly approaching to thorough completeness. And we have much pleasure in observing that some of the most intelligent guardians are already convinced that the treatment of all their sick people in this liberal and thoroughgoing manner is a prudent course, even in the interest of economy.

Still more agreeable is it to learn, from the speeches made at the dinner by Mr. Edgill (the clerk to the board) and by one or two of the guardians, that the keynote of a higher strain of thought than usually prevails amongst the middle classes on the subject of our duties to the afflicted poor, has been struck by those whose earnestness has prevailed in carrying through the important work of building their new hospital. More than one speaker energetically repudiated the doctrine that the duties of a guardian chiefly concern the lowering of the rates and not the care of the poor. And it is obvious that those of the Chorlton guardians who think in this way have not without much difficulty persuaded their more conservative colleagues to act on these principles. The dinner was attended not only by the guardians, and a number of gentlemen of local importance (including the mayor of Chorlton and Mr. Bazley, M.P.), but by Mr. Corbett and Dr. E. Smith from the Poor-law Board, by Dr. Anstie, and by a number of medical men interested in hospital and workhouse improvement. Many of the guardians spoke in a hesitating tone, which showed they were but reluctant converts to the belief that it is wrong to treat sick persons penally. And these good people got some encouragement to wavering from an official quarter. Dr. E. Smith's speech was a defence of the existing Poor-law system. Even Mr. Corbett, who, as a former local inspector, well knows and is well known by the guardians, and who honestly rejoices in the new hospital, seemed to "snatch a fearful joy," not unlike that of a mother who sees her baby begin to toddle at an unnaturally early age. It matters little, however. What has been done at Chorlton can never be undone; and the guardians may console themselves, when harassed by the timid or perverse suggestions of Mrs. Grundy, with the thought that under their auspices Manchester has once more assumed the lead, which she has so often known how to take, in works of the highest national importance.

We wish that it were in our power to mention the name of every person who has been forward in this good work, but unfortunately the names of some of the most earnest workers have escaped our memory. We cannot conclude this notice, however, without a word of warm praise for the intelligent and humane interest which the governor of the house, Mr. Brokenshire, shows in everything which tends to the welfare of the sick. If all workhouse masters had exhibited the same kindly disposition and the same knowledge and skill, very many of the most painful scandals which have disgraced the Poor-law administration would never have taken place.

On a future occasion we shall have something special to say as to the wonderfully small cost (about £66 per bed) at which this splendid Chorlton hospital has been erected.

PUBLIC HEALTH.

DR. FARR, F.R.S., as President of the Health Section of the Social Science meeting at Manchester, delivered an address on Public Health on Saturday last, which we regret that our space will not admit of giving *in extenso*, and of which we must therefore be content with quoting such passages as seem to us most interesting and useful in their application.

"Public Health is the subject of inquiry in this section. Every life here, the life of every community, is surrounded by dangers, which it is the business of science to study and of art to avert. These dangers are of various kinds, and spring from various sources. Enemies abroad and criminals at home are dangers to which every government is alive. There are other dangers not less formidable. Famine now ravaging India, cholera in Europe, early deaths, sufferings in hospitals, fevers in homes, are instances of a class of dangers that we seek to investigate, avert, and disarm.

"Health implies more than existence; it implies energy in strength and in intellect. In Anglo-Saxon, one word (*haeleth*) designated healthy man, hale man, brave man, hero; and *hâelend* was healer, saviour. These simple but noble conceptions it is our business to bear in mind. Development as well as conservation of life is the aim of public hygiene—the name by which our science is known in the continental schools. Private hygiene deals with individuals, public hygiene with communities; but inasmuch as nations are aggregates of men, it is evident that the division into two parts is only made for the convenience of study and of administration. Some things a man can do himself, others can only be done by town councils and imperial governments. It will be an advantage to confine our discussions to the field of public health.

"As political economy rests upon the idea of value, so our science rests upon the idea of health; and it is as important to

us to find a measure of health, as it is to the economist to find a measure of value. That measure must be simple, and applicable to all countries. Now, the measure that is in universal use is the rate of mortality: a unit of life loses a certain fractional part by death every moment, and the amount of loss in a unit of time expresses the rate of mortality. The unit of time is always a year, and the rate of mortality is found by dividing the deaths by the mean numbers living multiplied into the time. The rate varies from ·020 to ·040 in England—that is, in one place the deaths are 20; in another, 40 to 1000 living. Indeed, the range is still greater without a correction to which I will shortly advert.

"In a normal community constituted of persons of all ages by an equal number of annual births, there is a fixed mathematical relation between the rate of mortality and the duration of life. Thus, if the average rate of mortality in two cities is 2 per cent. and 4 per cent., then the mean duration of the lives of the inhabitants is fifty years in the one city, and twenty-five years in the other. Therefore, in saying that rate of mortality measures, it is conversely affirmed that length of days measures the health of nations. As the population fluctuates, certain corrections are necessary; the rates of mortality are determined at various ages, and from these the probabilities of living year by year are calculated and set forth in a life table that determines the path every generation passes over from rising to setting.

"The mortality is really a life measure, for the people living to a given sum of births increases in exact proportion as the duration of life increases.

"It is admirable in its simplicity: and if it is only an indirect measure of some of the elements of health, according to our larger definition, it expresses in masses the sickness, measures very accurately the influence of a variety of causes on life, and is a safe guide in practice."

Dr. Farr then passed in review the rates of mortality of the principal populations of Europe, showing that Russia stood lowest in the scale of health; England being on an equality with Sweden, Denmark, Belgium, and France, with a death-rate of 22 per 1000; whilst Norway was at the highest point of the standard, with a death-rate of 17 per 1000;—and that Italy had an annual life-loss of 150,000, and Germany 300,000, in excess of the numbers dying in France. After touching upon the extent to which the natural proportion of the sexes in our home population was disturbed by emigration, as well as by varying laws of vitality, Dr. Farr stated that the surplus of females in the United Kingdom was balanced by an excess of males in America and in the Australian colonies, and that by the extension of means of communication across the seas the equilibrium of the two sexes would be ultimately restored. He then adverted to the eager rivalry of nations in the art of destroying life in war, and asked why they should not be equally arduous in endeavours to save life in time of peace. The diffusion of zymotic disease is thus dwelt upon:—

"And this brings us to the class of zymotic disease, over which new power has been acquired recently by the discovery in England of the laws of its propagation. A surgeon dips a lancet into the pustule of a small-pox patient; on its point is a drop of transparent lymph; and that lymph mixed in the blood of a child that has not before had the disease, reproduces the lymph in new pustules, which will again propagate the disease among other children. The matter is volatile, and other children brought into the same atmosphere are said to catch small-pox. If the lymph is derived from a cow-pox pustule, it reproduces cow-pox. In large lying-in hospitals, it has been found by repeated experience that child-bed fever, or what I call *metria*, is generated: one woman falls ill; other women take it; every fresh patient that enters dies; and if the hospital nurse attends a lady out of doors, that lady will probably die of child-bed fever. Erysipelas, pyæmia, and gangrene are generated when you crowd wounded soldiers in military hospitals; and the specific matter of each of these diseases produces the same specific diseases in other soldiers.

"Typhus has been generated in jails, and has infected the judges in court as it infects physicians in fever hospitals. Here is a large number of diseases which we know how to produce; and a second group equally numerous we know how to propagate—such as measles, scarlatina, whooping-cough, and small-pox. In the statistical nosology, I classed all diseases of this kind together, under the head of zymotic diseases; and in the analysis of morbid phenomena gave names to the different species of matter generated in each malady. Thus, selecting a few, the matter of small-pox (variola) is called *varioline;* of cow-pox, *vaccinine;* of erysipelas, *erysipeline;* of scarlatina, *scarlatinine;* of syphilis, *syphiline;* of typhus, *typhine;* of dysentery, *enterine;* of cholera, *cholerine.* These matters introduced into the blood directly by inoculation, or by air, or by water, only induce their transformations in a certain number of the persons exposed to their action. They vary from day to day in strength. Cases of small-pox, for instance, occur every week in London: few children die of small-pox for weeks together; when suddenly the *varioline* becomes active, is multiplied with redoubled velocity, destroys large numbers, and after a time again becomes quiescent. All zymotic diseases follow this law, and are hence called epidemics, endemics, plagues; which, as their cause is not evident, have often been referred to supernatural agency. In their course they are generally influenced by atmospheric vicissitudes; but the zymotic stuff probably acquires its extreme diffusiveness in some wretched families, under hygienic conditions that favour its creation. Asiatic cholera thus originated in the delta of the Ganges, in spots where the native huts are on mounds, surrounded with pits, which are the receptacles of dejections and of the stagnant water they drink. Jameson says, 'bad water no doubt sometimes immediately induces the disorder.' In India they had advanced scarcely any further in the etiology. The English reports on the epidemic of 1832, and the elaborate official French report,* discussed all the conditions, except one, likely to influence its course, and their results were purely negative. They stated but did not solve the problem of the disease. The English system of registration was established in 1837, and in the epidemic of 1848-9, the age, profession, date of death, and the place of death of each person by cholera was published by the Registrar-General in the London weekly tables of mortality. These tables were freely distributed among men of science, who had thus an opportunity of studying the facts."

In alluding to the results of improved water-supply upon the mortality from cholera in London in 1849 and 1854, Dr. Farr recalled public attention to a discovery made by a late distinguished member of the medical profession:—

"But I am bound to notice here an important theory, which was advanced in 1849 by Dr. Snow, a London physician, who died young, but whose name will not perish. This, in a few words, is Snow's theory:—The rice-water discharges are to cholera what the lymph (varioline) is to small-pox; the matter is generated in the body, it is multiplied in the intestines, and diffused by direct handling, or by water, and I should add, by air, in certain states, carrying it suspended as dust—cholera-dust.

"Dr. Baly, in his admirable but cautious report to the College of Physicians, decided against the theory, and, in fact, the evidence then in its favour was not conclusive. But Dr. Snow persevered; he collected instances of the communication of the disease through pumps, wells, and rivers; and, in 1854, inquired at every house of certain districts where deaths from cholera occurred in Southwark. Thus he collected many new confirmatory facts. The reduction of some links had been left incomplete in the verification of the law that cholera matter (cholerine) is diffusible through water: these have been supplied in the present year partly by what I cannot but consider a deplorable accident."

Dr. Farr then described the leading features of the recent outbreak in the East London districts as affected by their water-supply, and remarked upon the disadvantage under which investigations are conducted in dealing with directors of private companies who "are not bound to tell us precisely what their servants do, and they have not done so; but circumstantial evidence irresistibly shows that polluted water was distributed over all the area of extraordinary mortality during a certain number of days, with the same result as in previous epidemic years. The source of mischief was no sooner pointed out than the plague began rapidly to decline; it appeared to be under control, and the mortality by cholera in East London is now as low as it is in the rest of the metropolis."

We have next an ingenious demonstration of the theory of irregular distribution of deleterious matter in water, which we

* Rapport sur la Marche et les Effets du Cholera-Morbus dans Paris, 1831.

will not attempt to epitomise lest we should unwarily fall into some mathematical pitfall or other:—

"When zymotic matter or any impurity is thrown daily into the mains, pipes, butts, houses, and, I may say, bodies of a population, it is irregularly distributed, and requires many successive daily changes to eliminate it; thus, when impure water is supplied for three days only, it may take thirty days to eliminate it. This may be demonstrated mathematically, and be illustrated by experiment.

"How did it happen that the disastrous effects of the diffusion of this matter through water was not discovered in Paris or elsewhere? For this simple reason, that when the observer has under his eyes a population all supplied with impure water, he cannot logically refer the effect to this specific cause. For this happens in cholera, as in all zymotic diseases, only one individual in a given number is susceptible; for the sake of illustration say 1 in 4. Only one in the number susceptible (say 1 in 5), by chance comes in contact with the stuff; and only one butt of water in a given number (say 6), contains a dose strong enough to induce Asiatic cholera, as it is called. Then, by the doctrine of chances, in a district only 1 in 120, (that is, 1-4, 1-5, 1-6), will be attacked, and about 1 in 240 will die of the disease. Great numbers will be attacked by diarrhœa and milder forms, but 119 will not be attacked while 1 is attacked. Here are 119 instances in favour and 1 against the water.

"In the worst district of the East London field, 193 in 10,000 people died of cholera. Say that 386 were attacked, then 9614 were not attacked, and the health officer might reason thus: 9614 persons in this district exposed to the cause—water—were not attacked, therefore the disease was not caused by the water; and of the 386 attacked some drank no water, the fact being that they were tainted in other ways. This logical difficulty is the origin of the greater part of the disputes on contagion. We overcame it by comparing the mortality of cholera in all the East London districts, the Lambeth districts, the Southwark districts, with the mortality of all the districts—many of them similarly situated as to condition—supplied with water from other sources. As the difference is uniformly enormous in successive trials at distant dates, the conclusion is irresistible."

In conclusion, Dr. Farr expressed his opinion that "we now know how Asiatic cholera can be subdued," and attributed this knowledge to the labours of such men as Jameson, Scott, Orton, Balfour, Parkes, Sutherland, Smith, Baly, Gull, Simon, and especially Snow, likewise to the English registration of deaths, "which enabled us to demonstrate by several experiments in the largest city of the world, the fatal effects of water tainted with excremental impurities."

Correspondence.

"Audi alteram partem."

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I know that I convey the general sentiment of my brother officers when I say that they are pleased at reading in their own pages the opinions of opponents of their professional claims. I allude to two letters from "A Civilian R.N.," in THE LANCET of 8th and 29th September.

Contrary to what prevails widely in the civil department of the navy—viz., a disposition to regard advantages gained by the medical branch as the forerunner of equally good things to the whole civilian body, and therefore to sympathise, in anticipation of what will follow in due course, without effort—contrary, I repeat, to this principle of action, this "Civilian R.N." does not permit affinity of interests to actuate him. We were taught at school "Fas est ab hoste doceri," and on that principle I shall quote his most prominent assertion, to prove how little there is in them of "unreasonable and unjust," as attributed by him to our claims.

The points on which he grounds this sweeping condemnation are as follows:—"The chaplain, chief engineer, and paymaster—the first necessarily because ranking first on the list of civilians; the others, if over fifteen years' standing, and senior to the surgeon—would have prior claim to cabin accommodation." This statement is correct, and expresses one half of the "formula" by which the late Admiralty nullified Sir John Pakington's warrant of 1859; when, being powerless to deprive medical officers of equality of rank with their army brethren, they sank it by increasing the rank of executive officers, and secondly by giving to other civilians superiority to them as an entire class, or equality with them on easier terms than the medical officers possessed. The assertion consists of two distinct facts, of which the first concerns our relations with the chaplain's branch, and the second those with other civilian officers. To understand the bearings of either a little of history is required.

Previous to the 30th of May, 1859, the chaplains of the navy took rank between deputy-inspectors and surgeons. On that date the medical warrant was published, and together with it a chaplain's warrant, distributing them into four classes, ranking respectively with assistant-surgeons over six years' service, with surgeons, with deputy inspectors-general under five years' service, and with those above five years' service, as they do to this day in the army. Thus things stood when Sir John Pakington's Board left office. The first retrogressive step was made in a circular dated 22nd February, 1860, which ordered "*that chaplains shall not hold any naval rank*," and this was so clearly understood that in an Order in Council dated 16th April, 1861, defining the "Relative Rank of Officers of the Navy and Army," chaplains were not named. By a subsequent Order in Council, dated 11th June, 1863, "Rank of Officers of the Navy and of the Navy and Army," chaplains are again introduced in one undivided body, without relative rank to executive officers, but *superior as a class* to the highest grade of medical officers, regardless of age or length of service.

This strange anomaly still exists, and its practical working is that in naval hospitals the chaplain of to-day is entitled to assume a status over that of the inspector-general of thirty years' service. The medical officers might, without impropriety, have demurred at this change, which sinks their profession, in some degree, below its level relatively with the army, where the four classes of chaplains still obtain.

Has it occurred, Mr. Editor, to your correspondent that this could be made a precedent for elevating another profession—the medical—as a class above the remaining civilian branches, so that its junior members, being graduated and registered medical men, shall take place superior to the seniors of the next profession or calling?

I do not think there is any such wish among the doctors, young or old, but at the same time, they do not see the unreasonableness of expecting that, coming into the service as full professional men, they are not to be at disadvantage with other civilians who owe their education to the Crown. They feel also, as so much has been conceded to the clerical profession, to their own disparagement, that it would be more consistent with what is "reasonable and just" to style medical men surgeons on first entry, holding equal rank with chief engineers and paymasters, than it will be to give to these officers of only fifteen years' standing—half-pay time counted—the same rank and position that they have to serve twenty years as registered practitioners to obtain.

It is not prudent to forget that the navy is in want of candidates for its medical appointments only, and not for the other civilian departments, and that regulations will be framed to meet that defect in our present naval organization.

I am, Sir, yours very thankfully,

A SURGEON IN THE NAVY.

REGINA *VERSUS* TOOMER.

To the Editor of THE LANCET.

SIR,—It is high time the earnest attention of the profession and the public should be drawn to this remarkable case.

Many weeks ago, a few medical men, happening to meet together one evening, were struck with astonishment at the report of this trial, which had appeared in the papers of that day. The same gentlemen wish to address a few remarks to you now.

The medical evidence at the trial most distinctly showed that no rape had been committed; and the rest of the evidence contained so many facts beside which rendered the charge improbable, that (notwithstanding the extraordinary remark of the judge, who said, in his summing up, "You have heard the evidence of the medical witness—I believe, a gentleman of respecta-

bility; but in my opinion medical evidence is of little avail in such cases, being merely theoretical") it appeared simply wonderful how the jury could convict, and still more so how the judge could pass on the prisoner the terrible sentence of fifteen years' penal servitude.

We pointed out this gross miscarriage of justice in a letter which appeared in *The Times* two days after; and that paper said, in a leader devoted to the case, that the judge, by passing such a sentence, evidently intended to call public attention to it, so that the injustice might be rectified. Since then, in reply to memorials and a deputation, Mr. Walpole has in effect declined to interfere.

Now, Sir, you say, "We believe there is not a surgeon in this kingdom who will not endorse the opinion given by Mr. Maurice." We wish to say, in addition, that if Mr. Maurice's evidence is to go for nothing, it is a farce to call for medical evidence in future; and when, as happens again and again, the surgeon's is the only authoritative corroboration of a charge of criminal assault, and by means of which a scoundrel is brought to book, it ought also then to go for nothing, "being merely theoretical."

But is it merely theoretical? Is it not a scientifically exact interpretation of signs and appearances with the least possible expression of opinion? Is it not accepted in numberless cases as an honest and reliable aid to the jury? Are there not many cases which could not be decided at all without it? In this solitary case, then, it should not have been set at nought; or rather, having been set at nought, the mistake—the gross injustice consequent thereon, in the condemnation of an innocent man to life-long imprisonment—should not be allowed to stain the annals of British law for a single day longer.

We are, Sir, your obedient servants,

Oct. 1866. A FEW MEDICAL MEN OF NORTH LONDON.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

IN former letters I intimated that a house inspection by medical men was being arranged here. Ten medical gentlemen were selected by the Board of Health for this duty, and they have inspected various parts of the city. Reports were sent in by each inspector daily, so that no time was lost in having attention directed to any nuisances or cases of illness occurring during the visitation. I understand that no cases of Asiatic cholera were met with by any of the inspectors, and that the general health of the city was found to be good.

Several cases of cholera are known to have occurred in the city; but as they have been sporadic, and the disease has not appeared in the epidemic form, the Cholera Hospital has not been opened. All arrangements have been made so that it can be ready for the reception of patients on a few hours' notice.

Leith has not been quite so fortunate: several cases have occurred there, and of these a considerable proportion have been fatal. A new hospital, made of wood covered with corrugated iron, has been opened near the town. It consists of two wards, each 28½ feet long, 21 feet broad, and about 15 feet high; with convalescent wards, nurses' rooms, bath rooms, &c. The building is warmed by hot water, and ventilated by the windows. The absence of open fireplaces in the wards strikes one as being objectionable. The use of "hard ale" is stated in several instances to have been the cause of the choleraic attacks, and the authorities have therefore prohibited its sale.

In addition to the places already mentioned in former letters as having suffered from severe diarrhœa or cholera—namely, Dundee, Perth Penitentiary, and Montrose,—cases have also been met with at Glasgow, Wishaw, Kirkcaldy, Aberdeen, Fraserburgh, Brechin, Charleston, Airdrie, Pitullie, and Coatbridge. The epidemic has been most severely felt at Fraserburgh and its neighbourhood, where the deaths have been about forty. At Montrose, too, there has been a number of deaths. In Glasgow the disease has not yet assumed the epidemic character, and active sanitary measures have been taken by the Board of Health, under the direction of Dr. Gairdner.

In Edinburgh, for some weeks past, the general health has been remarkably good, with the exception of bowel attacks. From the weekly mortality returns of the officer of health, it appears that the deaths for the week ending

1st Sept. were	63,	equivalent to ann. mort. of		19·48	per 1000
8th	,,	72	,,	22·26	,,
15th	,,	55	,,	17·	,,
22nd	,,	61	,,	18·86	,,
29th	,,	76	,,	23·5	,,

On Sept. 15th a man is reported to have died of British cholera, after some days' illness. On the 22nd, one death from cholera and one from British cholera are stated to have occurred. On the 29th two deaths from British cholera and one from choleraic diarrhœa are reported.

It is with much pleasure that I inform the readers of THE LANCET that Prof. Laycock has steadily improved in health, and is now so far convalescent as to be able to take carriage exercise.

From the announcement of the University, it appears that the session will commence on Thursday, Nov. 1st. The Extra-mural School will open on the same day. As the number of lectures have increased at this school, arrangements have been made for reoccupying Minto House as a medical lecture-hall. This building is interesting from many associations connected with the profession in Edinburgh; and the fact of its again being used as a medical school speaks well for the vitality of professional instruction in the Scotch metropolis, for it may be regarded as being in opposition to the school within the College of Surgeons. The introductory address will this year be delivered by Dr. P. Heron Watson, lecturer on Surgery, on Wednesday, Oct. 31st.

Preliminary to the commencement of the session, the half-yearly meeting of the General Council of the University will be held, on Friday, Oct. 26th, when it is to be hoped the proceedings will be of a more interesting nature than at the last meeting.

Edinburgh, Oct. 1st, 1866.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such at a meeting of the Council on the 11th inst.:—

Collins, John Hammett, Jumalpore, East Indies; diploma of membership dated July 26, 1839.
Cumming, Robert Butterfield, M.D. St. Andrews, Malpas, Cheshire June 16, 1835.
Hallsworth, Samuel Marsden, Atherstone, Warwickshire; Oct. 2, 1860.

APOTHECARIES' HALL.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on Oct. 4th:—

Smith, Henry, Blackrod, Chorley, Lancashire.

The following gentlemen also on the same day passed their first examination:—

Anderson, William, St. Thomas's Hospital.
Fawsitt, Thomas, Manchester Hospital.
Prior, Richard Henry, King's College Hospital.
Waller, Arthur, St. Thomas's Hospital.

IT is noteworthy that during the past year only two candidates were examined for the dental diploma, both of whom passed.

THE Saxon surgeons have issued what the Americans call "a card," thanking the people of Vienna, the magistrates, and the press for their hospitality and courtesy.

IN the week ending Saturday, October 6th, the births in London and twelve other large towns of the United Kingdom were 4060; the deaths, 2984. The annual rate of mortality was 25 per 1000 persons living.

THE weather has been so warm in Berlin, that one of the chesnut trees in the Linden promenade is decked with a second crop of blossoms—a thing hitherto unheard of in the annals of Berlin.

THE Commissioners of the Metropolitan Police of Dublin report that the number of houses in that city which are destitute of those appliances and means of cleanliness on which the health of the inmates depends is 1648.

DEATH IN THE HAND.—American papers represent that an Italian has been arrested in New Orleans charged with murder, it being alleged that on his finger he wore a ring with a snap-claw in it filled with deadly poison. A scratch with it would cause death in three hours.

CHLORIDE OF LIME is applied in large quantities at almost every street-corner in Venice and other Italian cities as a preventive against cholera.

THE "Moniteur" publishes a report from M. Béhic, Minister of Agriculture and Commerce, on the subject of the decrease in the disease among cattle.

IT is proposed to establish, in Lancashire, an asylum for idiots and imbeciles belonging to the seven northern counties (including Cheshire). It is alleged that there are upwards of 13,000 cases in these counties, and there is no asylum into which they can be admitted.

AT the last Old Bailey sessions, Dr. Juler prosecuted two youths for attempting to extort money by an odious accusation against him, and they were convicted and received a sentence of seven years' penal servitude. Last week a warrant was applied for and granted against the doctor for perjury. He got information of this, and absconded.

THE cattle plague has not entirely left us. During the past week 67 fresh cases were reported, showing an increase of nine over the preceding week. There was not a single case returned from the West Riding, Wales, or Scotland, and only five from Cheshire. Lancashire gives more than one-third of the total number—namely, 28 out of 67.

THE CONTAGIOUS DISEASES PREVENTION ACT, 1866. The Lords Commissioners of the Admiralty and the Secretary of State for War have appointed Dr. Peter Leonard to be Inspector of Certified Hospitals under the above-mentioned Act.—Notice is hereby given that William H. Sloggett, Esq., Staff Surgeon, R.N., appointed Visiting Surgeon under the provisions of the Contagious Diseases Act of 1866, notice of whose appointment appeared in the *Gazette* of the 2nd of this month, has been appointed Visiting Surgeon at Plymouth and Devonport, and not Devonport only, as formerly notified.

THE FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW.—At a meeting of this Corporation, held on the 1st inst., the following office-bearers were elected for the ensuing year, viz.:—President: Dr. J. G. Fleming. Visitor: Dr. A. Anderson. Treasurer: Dr. J. Coats. Honorary Librarian: Dr. G. Rainy. Vaccinator: Dr. J. Dunlop. Councillors: The President, *ex officio*; the Visitor, *ex officio*; Drs. W. Weir, A. D. Anderson, R. S. Orr, J. Watson, and J. Coats. Board of Examiners: Drs. J. Adams, G. Buchanan, A. Anderson, T. Watson, W. Lyon, A. Buchanan, J. Morton, R. Perry, R. D. Tannahill, and J. B. Cowan. Examiners in Arts: Prof. Ramsay and Dr. Bryce. Clerks: Dr. L. Hill and Mr. W. H. Hill. Librarian and Secretary: Mr. Alex. Duncan.

DR. GIBBON, medical officer of health for the Holborn district, in a report made to the Local Sanitary Committee, states that, from his experience in 1854 and during the present epidemic, he is convinced that it is a mistake to send cholera patients to the hospitals. The argument that the removal prevents the spread of the disease is, he thinks, unsupported by facts. Cholera, unlike small-pox and typhus, does not diffuse its specific poison through the atmosphere, but, as far as we at present know, it is conveyed from the discharges of the sick by means of water and watery vapour. If this be so, it is obviously desirable to keep the patient in one place, and at once to disinfect his discharges.

PRISON PUNISHMENTS.—Dr. M'Donnell, the medical superintendent of Mountjoy Government Convict Prison, in his report on the past year expresses his regret that public opinion has of late set so strongly against corporal punishment. The result is that prison punishments are awarded which tend to develop scrofulous diseases, from which the criminal class suffer so greatly, and which occasion so large a proportion of the mortality in our convict prisons. Restricted exercise, insufficient clothing, and curtailed diet are all of them objectionable as punishments for prison offences. A high scale of diet, Dr. M'Donnell reports, is not necessary for convicts; the great majority of them do not so feel the degradation of their position as to be depressed by it and to require the counteraction of additional food, and the few who do take it much to heart so as to get out of health do not ask for more food, and could not digest it if they got it. The scale of diet should, of course, be as economical as is compatible with the maintenance of health, but then a diet punishment is inadmissible, and it gives a kind of triumph to the offender if he is taken off punishment by order of the medical officer. Curtailed diet tells quickly on those who are still growing, and also on the elderly. After some days a low degree of fever begins, with considerable thirst. Experienced offenders, however, do not drink, they merely dip the tongue in water. They do not allow themselves to drink water freely until the period of punishment is nearly up; then they take water copiously. Handcuffs make a severe punishment, and the general health does not suffer much. The dark cell, according to Dr. M'Donnell's report, is now rarely or ever used; but when it was he did not find that it produced the terrible effects attributed to it.—*The Times.*

A COMMITTEE of the Lords of her Majesty's Most Honourable Privy Council sat a few days ago at the Council Chamber, Whitehall, on the subject of the cattle plague. The lords present were the Right Hon. Spencer Walpole, and the Right Hon. H. Corry. Mr. Helps and Colonel Harness attended the committee.

DURING the month of September, 1866, there were registered in the eight principal towns of Scotland the births of 2900 children, of whom 1522 were males, and 1378 females. Of these, 2626 were legitimate, and 274 illegitimate; being in the proportion of one illegitimate in every 10·5 births, or 9·4 per cent. of the whole as illegitimate.

THE CHOLERA.—The "Western Morning News" reports a sudden and serious outbreak of cholera at Zeal Monachorum, in Devonshire, which is said to be a well-drained and generally healthy village. The wife of the schoolmaster was first seized, and almost simultaneously several other persons were attacked, the disease in the earlier cases terminating fatally within a few hours. By Monday night, out of a population of 180, ten persons had died and thirteen were seriously ill. The outbreak is ascribed, rightly or wrongly, to the fact that those persons who were first seized had recently returned from a town in the east of the county, where the disease is prevalent.

THE SANITARY IMPROVEMENT OF EDINBURGH.—At a special meeting of the Town Council, held on Monday, it was agreed by a majority of 22 to 12, to proceed with the scheme of sanitary improvement promoted by Lord Provost Chambers. The scheme involves an expenditure of about £200,000, which it is proposed to raise by an assessment of 2*d.* in the pound continued for twenty years. The improvements proposed include the clearing out of old properties in some of the more densely crowded localities, and the opening up of other portions by cutting new streets through them. It also includes the formation of a wide street to the north of the University, by which the Museum of Science and Art, recently inaugurated by his Royal Highness the Duke of Edinburgh, will be thrown open to better view. The division in the Council took place on the question whether the plans should be proceeded with at once, or should lie over till after the November elections. On the one hand, it was urged that the preparation of the statutory notices rendered it necessary to decide at once, while in favour of delay it was pleaded that the wards should be allowed to express a further opinion on the scheme. The necessity for something being done at once was acknowledged by the majority noted above. A portion of the dissentients tabled a protest against being held personally liable for any steps taken. On Thursday, at a very full meeting of the Merchant Company, it was unanimously resolved to support the Lord Provost in his scheme.

FUMIGATION!—Travellers contemplating a trip to the south must be prepared to submit at a moment's notice to any strange vagaries that the Sanità of the various towns they visit may think it expedient to indulge in. The military correspondent of *The Times* relates how, in leaving the railway train at Padua or Vincenza, passengers are herded together in a large room, apparently for the purpose of receiving their luggage. Not so; they are there to be fumigated, and from such fumigation there is no escape; the sick and the healthy, the young and the old, males and females, all must submit to the common fate. And the fumigation is no light matter, for the air is saturated with fumes of chlorine gas, a chemical agent which not only disinfects, but bleaches the coloured clothes of the patients, and afflicts the mucous membrane of his nose. Once in the fumigating pew, travellers are kept there coughing and expectorating till the Sanità is satisfied, and until they are so thoroughly smoked as to be beyond suspicion. This is what happens to those in health; the vexatious impediments and delays to which the ailing are subjected almost defy description, so extravagant are the apprehensions of the Italians on the subject of cholera.—*Pall Mall Gazette.*

Obituary.

NATHANIEL HIGHMORE, ESQ., M.R.C.S.

IT is our painful duty to record the death of another professional brother. Nathaniel Highmore, Esq., M.R.C.S., died at his residence, Newland, Sherborne, Dorset, on the 9th inst. Mr. Highmore was a man without guile; but with a hearty, genuine openness of character, he possessed the no less admirable qualities of energy and perseverance. Only those who have gone through the same experience know what the life of a country doctor means. The requisite reliance upon self in cases of emergency, when no second opinion is at hand, requires a man not only to be a good doctor, but a skilful and bold surgeon. He must not hesitate, or the delay might be dangerous, and his reputation gone. The real hard work of mind and body in "country practice" often shortens the career of those engaged in it. We are, however, glad to be able to state that this was not the case with Mr. Highmore. He died at the advanced age of seventy-seven, having been fifty-three years in the profession. Yet although for more than half a century ever assiduous in the alleviation of the sufferings of others, he still found time to court the sweet muse Euterpe, as well as to pay his devotions to the graver god Æsculapius; for we find him at the age of sixty-five learning the part of tenor in order that he might enter the parish church choir, which he afterwards regularly attended.

Mr. Highmore commenced the study of his profession at the united hospitals of St. Thomas and Guy, and was a dresser for Mr. Cline; he was also for many years the intimate friend of Sir Astley Cooper, to the inculcations from whose masterly mind, doubtless, his after successful practice may in a great degree be attributed. He was the descendant of Nathaniel Highmore, A.M., D.D., Trinity College, Oxford, 1643, who is mentioned in Wood's "Athenooxoniensis."

In the early part of his career he met with a remarkable case of a fœtus in the abdomen of a young man sixteen years of age, which he removed at the post-mortem examination, and deposited in the museum of the Royal College of Surgeons.

The funeral of Mr. Highmore was attended by many of his professional brethren and gentlemen holding influential positions, who thus testified to the esteem in which he was held.

PETER SMITH, M.D.

The subject of the present notice was an American physician resident for the last six years in London, latterly at 29, Wimpole-street, and whose untimely death at the age of forty-eight years has left many mourners amongst his friends. Dr. Peter Smith's career was an exceptional one. Natural ability and restless enterprise enabled him to achieve for himself, in many places and under unusual circumstances, reputation, practice, and position. The unfortunate civil differences in the United States led to the loss of a large fortune, acquired by successful practice. He had already succeeded in grasping prosperity anew, when death stepped in and abruptly put an end to his career.

Peter Smith was born in Maçon Co., Kentucky, in the year 1818. His father was a clergyman. He graduated as M.D. in 1838, in the Academy of Medicine, Transylvania—at that time one of the best western schools of medicine. He began the practice of his profession in Nashville, Tennessee, at a very early age, at which place he shortly obtained a high reputation as an operative surgeon and quickly obtained a large practice. Prompted by a desire to increase his technical knowledge he graduated as M.D. at Philadelphia in 1845, there forming friendships with many of the eminent professors in the Pennsylvanian University. He next established himself in practice in New Orleans in 1847, obtaining in this place immediate recognition of his practical skill. Soon after, on the discovery of the Californian gold-fields, he went to San Francisco, and almost immediately after his arrival was elected to fill the post of City Physician in the newly risen town. Here a very curious episode in his adventurous life occurred. His duties involved the charge of the sick poor of the whole town, and he had a contract with the municipal authorities for their medical treatment at so much per head. A severe epidemic of cholera was then prevalent. Dr. Smith established forthwith an hospital with over 200 beds, and successfully carried out the necessary medical and sanitary measures. The debt thus incurred by the town to Dr. Smith shortly amounted to between seventy and eighty thousand dollars, but when the bill was presented a new set of city functionaries had been elected, who repudiated the obligation. Dr. Smith brought an action against the corporation, and obtained judgment in his favour, and a large number of lots of the city land were taken in execution. He thus obtained his claim, but a fruitful source of litigation to both corporation and purchasers was left behind, and the "Peter Smith titles" will for some time hold a prominent place in the law calendars of San Francisco. Subsequently Dr. Smith travelled for some time in Central and South America, and for a considerable period practised in Lima. In 1854 he came to Europe, and visited England, Russia, France, and Belgium, devoting a good deal of his leisure time to the perfecting of an invention in gunnery. In 1860 he married an amiable and accomplished lady, a native of Brussels, whose acquaintance he had formed some years previously. His intention was then to return to America permanently, but while in Paris the secession movement in the States began, and his resources in America ceased altogether to be available. He thereupon found it necessary to devote himself anew to the practice of his profession, and with that view established himself in this metropolis, where he was known only to a few, and had the aid alone of his own energy to contend against great disadvantages. He was a frequent visitor at the principal metropolitan hospitals. For six years he toiled in London, and established for himself a reputation which was increasing. For some months previous to his decease he became ill. Pain and swelling at the root of the neck and great bodily debility necessitated rest. His malady progressed, and he died on Sept. 9th, at Bath. The disease of which he died was aneurism of the innominate artery, involving in part also the arch of the aorta, and causing death by pressure on the trachea. His sufferings—and they were extreme—were borne with fortitude and resignation. To Dr. Falconer, of Bath, and other medical friends, he was indebted for unremitting and skilful attention in his last moments. Thus closed the eventful life of a physician, remarkable both as an individual and as a favourable type of the Western American States.

M. ROSTAN.

This eminent Professor of Clinical Medicine at the Faculty of Paris, has just died at the age of seventy-seven. For twenty-five years did this highly-gifted physician occupy that important chair, and his indefatigable efforts were crowned with the most signal success. He was the favourite of several generations of students, and justly so, as he possessed all the qualifications of a professor: a profound knowledge of and love for medicine, a handsome and dignified person, an eloquence of the most captivating kind, an ardent wish to convey information in the most agreeable manner, and most exemplary punctuality. Professor Rostan was the head of that school in France which referred all diseases to organic changes, his views being lucidly put forth in the successive editions of his great work on "Clinical Medicine." To this deceased physician we owe important investigations on softening of the brain, and many other works of value. M. Rostan was the great rival of Broussais; and both had, at that period, crowded audiences of enthusiastic pupils, this circumstance being mainly owing to the oratorical talents of both. The profession in Paris have testified by their presence at the funeral, and by the discourses delivered on the occasion, how highly they valued the departed physician.

DR. DREW, OF WYNBERG.

FOR the last twenty-five years (says the *Cape Standard*) this gentleman enjoyed an extensive practice, but latterly declining health limited the sphere of his labours. Of strong constitution and active habits, he triumphed over many difficulties, and accomplished an amount of professional toil that would have prostrated prematurely men of a different mould. His professional brethren and the public equally valued the soundness of his medical knowledge, and the natural sagacity of his character. The poor always found in him a friend, but the amount of good he did amongst them could only be fully appreciated by those who knew him intimately, or had seen him amid scenes of suffering and poverty. There, his kindness and sympathy could not be misunderstood. Under a manner somewhat eccentric, there existed much genuine worth, and his name will long be whispered around many a hearth with feelings of respect and gratitude.

MEDICAL VACANCIES.

Brixton &c. Dispensary—Resident Medical Officer.
Bridgwater Union Workhouse—Medical Officer.
Islington Dispensary—Surgeon, vice Mr. Summerhayes, resigned.
Middlesex Hospital—Medical and Surgical Registrars.
Nottingham General Hospital—Resident House-Surgeon.
Shepton Mallet Union (4th District)—Medical Officer.
St. Mary's Hospital, Manchester—Assistant House-Surgeon.

MEDICAL APPOINTMENTS.

W. H. AXFORD, M.B., has been appointed Medical Officer to the Bridgwater Infirmary, vice R. Axford, M.R.C.S., resigned.

H. BRICKWELL, F.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Somersham District of the St. Ives Union, Huntingdonshire, vice T. Johnson, M.R.C.S.E., resigned.

D. DUCE BROWN, M.A., M.D., has been appointed Assistant-Professor of Materia Medica in the University of Aberdeen.

A. CRABB, M.D., has been appointed Medical Officer for the Longfleet or 4th District of the Poole Union, Dorsetshire, vice H. D. Ellis, M.R.C.S.E., resigned.

J. DEANE, M.D., has been elected Medical Officer and Public Vaccinator for the Warboys District of the St. Ives Union, Huntingdonshire, vice H. Brickwell, F.R.C.S.E., whose appointment has expired.

A. SCOTT DONKIN, M.D., L.R.C.S.Ed., Lecturer on Forensic Medicine to the University of Durham College of Medicine, Newcastle, has been appointed a Physician to the Sunderland Infirmary and Dispensary.

J. W. EDGER, M.D., has been appointed Medical Officer for the Ravenstonedale District of the East Ward Union, Westmoreland, vice W. D. Blades, M.R.C.S.E., resigned.

H. N. EDWARDS, M.R.C.S.E., has been appointed Surgeon to the Shrewsbury Dispensary, vice H. Fenton, M.R.C.S.E., resigned.

P. S. FENTEM, M.D., has been appointed Medical Officer and Public Vaccinator for the Hartington Middle Quarter District of the Bakewell Union, Derbyshire, vice D. Knox, M.D., resigned.

J. INNES, L.F.P. & S. Glas., has been elected Surgeon to the Blockairn Iron Works, Glasgow, vice Hugh Rae, L.F.P. & S. Glas., deceased.

D. LEWIS, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Western District of the Newport Union, Monmouthshire, vice W. James, M.R.C.S.E., deceased.

J. M'CARRON, L.F.P. & S. Glas., has been elected Vice-President of the Glasgow Faculty of Medicine for the ensuing year.

F. MANSER, M.R.C.S.E., has been appointed House-Surgeon to the Tunbridge Wells Infirmary, vice Mr. R. Davy, resigned.

G. R. NORRIS, M.R.C.S.E., has been appointed Medical Officer for the Parishes of Brompton Ralph and Clatworthy in the Williton Union, Somersetshire, vice J. Nicholls, M.D., resigned.

Mr. H. J. PRITCHARD has been appointed Assistant to the House-Surgeon of the Huddersfield and Upper Agbrigg Infirmary, vice Mr. Wm. C. Bland, resigned.

J. W. SMITH, L.R.C.P.L., has been appointed Medical Officer and Public Vaccinator for the Kilburn District of the Thirsk Union, Yorkshire.

H. THOMSON, M.D., has been elected President of the Glasgow Faculty of Medicine for the ensuing year.

B. WILSON, L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Dent District of the Sedbergh Union, Yorkshire, vice W. A. G. James, M.R.C.S.E., resigned.

W. T. P. WOLSTON, M.B., late Resident Physician of the University Clinical Wards, Edinburgh Royal Infirmary, has been appointed Resident Medical Officer of the Royal Hospital for Sick Children, Edinburgh, vice Dr. G. Moffat, now at the Sick Children's Hospital, Manchester.

Births, Marriages, and Deaths.

BIRTHS.

On the 1st inst., at Upper Westbourne-terrace, Hyde-park, the wife of B. E. Mosely, M.R.C.S.E., of a son.

On the 2nd inst., at Bruton-street, Berkeley-square, the wife of Dr. Barclay, of a son.

On the 3rd inst., at Bishop's-terrace, Bridlington Quay, the wife of Dr. Kelburne King, of Hull, of a daughter.

On the 4th inst., at George-street, Portman-square, the wife of P. A. Hill, Surgeon, of a daughter.

On the 9th inst., at Oak House, Battersea, the wife of W. H. Kempster, M.R.C.S.E., of a son.

MARRIAGES.

On the 3rd inst., at Pennybridge, J. V. Worthington, L.R.C.P., L.R.C.S.Ed., &c., of Garston, near Liverpool, to Annie, third daughter of Thomas Jackson, Esq., of Arrad, Lancashire.

On the 4th inst., at Holy Ascension Church, Settle, Dr. Bryan H. Allen, of Hastings, to Susanna, eldest daughter of the late John Wildman, Esq., of Settle, Yorkshire.—No Cards.

DEATHS.

On the 8th ult., Wm. James, M.R.C.S.E., of Newport, Monmouthshire.

On the 30th ult., at Devizes, J. Ayton, M.D.

On the 1st inst., at Eastbourne, Sussex, Henry John Radcliffe, M.R.C.S.E., aged 57. Mr. Radcliffe practised as a surgeon at Brentford Butts, Middlesex, with much success during the long period of thirty-two years.

On the 2nd inst., D. R. Wyllie, L.F.P. & S. Glas., of Montrose-street, Glasgow.

On the 3rd inst., at Eaton-place, Hillhead, Glasgow, J. M'Connochy, M.D., formerly Lieutenant Royal Marines, aged 70.

On the 3rd inst., J. H. Freeman, M.R.C.S.E., of Mile-end-road, aged 53.

On the 4th inst., at Bishop's-terrace, Bridlington Quay, Ida Margaret, infant daughter of Dr. Kelburne King, of Hull.

On the 9th inst., at Culloden House, Rotherhithe, Wm. Murdock, M.D., Medical Officer of Health to the Parish of St. Mary, Rotherhithe, aged 61.

To Correspondents.

A Surgeon's Daughter, (Worksop.)—It is the almost invariable custom of medical practitioners to refuse payment for services rendered to the members of the family of a professional brother, whether he be living or dead. The duty, however, of rejecting a fee from the daughter of a surgeon becomes doubly imperative when that daughter is an orphan, and has to exert herself as a governess to obtain her daily bread. The late Dr. Merriman never took a fee from a curate or a governess. We cannot conceive of a case in which a respectable member of the profession would consent to receive remuneration for services so rendered.

Homo.—The lectures appeared in THE LANCET in 1827 and 1828.

M.R.C.S.—Unless the *contract* was made directly with the master, he is not responsible for the payment of charges incurred by his servant for medical attendance.

Dr. Gordon Stewart, (Cape of Good Hope.)—The notice shall be inserted.

AN APPEAL TO THE BENEVOLENT.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me earnestly to appeal, through the columns of your journal, for aid on behalf of Mrs. Todd, the widow of Dr. John Todd, who was twenty years in practice in the Old Kent-road, Camberwell, and latterly in Bermondsey? A few years since he suffered from a severe attack of rheumatic fever, which was followed by paralysis, with loss of power on one side. For the remainder of his life he was almost entirely incapacitated from following his profession, and about five weeks since he died after a long and protracted illness, leaving his widow destitute. There are seven children, four boys and three girls, the latter quite young. Two of the boys are in St. Ann's Schools, and one of them will leave in March next. Of the others, four are entirely, and one partially, depending on the mother. By the assistance of many kind friends, and by the strictest economy, they have been enabled to keep free from debt. Endeavours are being made to place Mrs. Todd in a position in which she will be enabled to maintain herself and children, and for this purpose a sum of money is required. About half the amount necessary has already been obtained by private subscription, and I now plead her cause in the hope and belief that there will be a generous response, and that by a little timely assistance she and her children may be saved from all the horrors of poverty. She is a lady of great energy and perseverance, and there is every reason to believe that with the aid now sought she will be enabled to maintain herself and family. Those who may kindly contribute may rest assured that their gifts will not be applied for present wants, but that they will be devoted solely to establish her.

This is a case of real distress, one thoroughly deserving of sympathy and help, and will bear the fullest investigation.

The Rev. A. W. Snape, Incumbent of St. Mary Magdalen, Southwark, and the Rev. Jordan Palmer, Streatham, will gladly bear testimony to the genuineness of the case.

Contributions will be thankfully received by Mr. Edward Weaver, Secretary, British Home for Incurables, 73, Cheapside, E.C., or by myself.

I am, Sir, your obedient servant,
Kensington, October, 1866. H. LLEWELLYN WILLIAMS, M.D.

A Country Practitioner.—The delay in the publication of the Pharmacopœia is most reprehensible. As yet there are no signs of its appearance, nor is any reliable information to be obtained on the subject.

THE first portion of *Dr. D. C. Black's* (Oban) communication, "On Syphilitic and Phagedenic Ulceration," shall be published in our next.

MODEL VILLAGES.

THE *Pall Mall Gazette*, in one of its *Occasional Notes*, referring to the proposed establishment of model villages, says:—

"The idea is a noble one; and had the late Prince Consort been still amongst us, we should have had hopes of seeing it nobly carried out. But who is there now to undertake it? Such an enterprise would surely form a worthier and fitter memorial to his Royal Highness's memory than the costly and unmeaning stocks and stones which now encumber the land in all directions to do him honour."

Mr. J. Gillingham, (Chard.)—The apparatus which Mr. Gillingham has contrived is most ingenious and praiseworthy. We shall shortly place before our readers a full account of this clever contrivance.

Mr. F. Donford.—In its present form, the letter is libellous, and cannot be inserted.

Enquirens, (Carmarthen.)—"The Chemistry of Daily Life," by order of a bookseller.

Union.—Lumley's Manual for Poor-law Surgeons.

THE COMPETITIVE EXAMINATION OF THE ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I beg to call your attention to a great hardship the Scotch medical students labour under who intend entering the army service—viz., the competitive examination taking place in March, when they cannot graduate till the following month, thus excluding them from entering the service till the following August. I have known a number of young graduates who, missing the examination in March, preferred, and in some cases were compelled from pecuniary reasons, to take up the first opening that presented itself rather than wait and lose time till the next competitive. Is there no opportunity of calling the attention of the Director-General to this state of affairs? I am certain a number of well-qualified men would avail themselves of an April examination, who cannot appear in March.

I am, Sir, your obedient servant,
Liverpool, October 8th, 1866. A SCOTTISH UNIVERSITY STUDENT.

Parens.—The school named is as good as any other in the metropolis. The success of the pupil, however, depends mainly upon himself, and but little on the school at which he enters.

THE interesting letter of *Dr. R. N. Rubidge* (Port Elizabeth, South Africa) shall appear probably next week.

Fair Play.—Yes, the qualification is sufficient, the rules of the Society merely requiring that the practitioner should be duly qualified.

CHEMISTRY OF THE HARROGATE SPRINGS.

To the Editor of THE LANCET.

SIR,—I have been from home for a few weeks, and therefore did not have an opportunity of seeing your valuable journal. On my return the other day, in looking over the last three or four numbers, I find in THE LANCET of September 9th an article, headed as above, in which there is a complimentary notice of me. Yours being the leading medical journal, and so often used as a reference, I beg to point out an inaccuracy in the following remark on these waters:—"Dr. Hofmann's analysis of them in 1854 detected no *chloride of iron*; but this salt was found abundantly *in them* in 1866." There are, as you must be aware, a great number of different kinds of springs in and around Harrogate; but *chloride of iron* (Fe Cl.) exists only in *one* (known formerly as the Cheltenham saline chalybeate), and to the extent of *sixteen grains* in the gallon. The presence of this salt *was discovered by me* in August last year. Dr. Herapath designates it "the most extraordinary chalybeate known." As far as I can learn it is *sui generis*. Hundreds have gone through a course of the water this season, and with the most marked and beneficial results. In cases of debility arising from impoverishment of the blood, from whatever cause, its effects are decided and unrivalled. It has also been found most serviceable in the various forms of scrofula, chronic glandular swellings, weak digestion, and dyspepsia; in all functional derangement of the nerves, such as tic, neuralgia, chorea, some stages of epilepsy, and most hysterical affections; and Dr. Kennion writes, "Amongst other obvious cases where it may be used with advantage is its efficacy in fatty degeneration of the heart." Its great and potent value must be due, in a very great measure, to the form in which the iron exists in the spa, and which makes the water unique.

The pump-room now adjoins the Concert Hall in Low Harrogate, and the Royal Chalybeate Spa is called the "Chloride of Iron Spring, or Dr. Muspratt's Chalybeate."

I remain, Sir, yours, &c.,

College of Chemistry, Liverpool, October 1st, 1866. G. SHERIDAN MUSPRATT, M.D., Professor of Chemistry.

Mr. Maynard.—The articles by Dr. Bucknill to which we referred are in the sixth and seventh volumes of the *Journal of Mental Science*, published by Churchill.

An Enquirer.—Entirely voluntary.

Dr. Foster, (Birmingham.)—The abstract shall be noticed in our next impression.

Constant Subscriber, (Lewisham.)—The admission is by ballot, on the recommendation of three or more Fellows.

Anxious.—We have no means at hand to furnish our correspondent with the information he requires.

CHOLERA.

To the Editor of THE LANCET.

SIR,—As the cause of cholera is still unknown, I beg to forward the following, believing that every increment of knowledge as to its possible origin will be ultimately utilized to clear up the mystery. On looking over the map of the "coal fields of the world," as given in the *Quarterly Journal of Science* for October, 1866, it is evident that cholera exists in all those countries where coal abounds. Starting from Hindostan, it spreads east and west in the direction of this deposit, and crosses over to America in the same tract. Mr. Jevons says: "What is petroleum but the essence of coal distilled from it by terrestrial or atmospheric heat?" As telluric influence has been denied by many as the cause of this disease, I merely point out the coincidence.

I am, Sir, your obedient servant,

South Hackney, October 6th, 1866. WM. STORY.

Mr. R. W. D. Stewart.—The virtues of the beverage in question are well known.

Dr. W. S. Jones.—As no report of the proceedings to which Dr. Jones's letter refers appeared in THE LANCET, we cannot with propriety publish the communication sent to us.

B.—Separate accounts should be sent. As the services rendered were special, the fees should be special also. The sum named is a fair remuneration.

Mr. J. Augustus Hayden is thanked.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from — Mr. Savory; Dr. Scoffern; Dr. Wotton, King's Langley; Dr. Davy; Mr. Reed, Melton; Mr. Edwardes; Dr. O'Keefe, Widnes; Mr. Johnson; Dr. Fleming, Glasgow; Dr. King, Hull; Dr. Wolston, Edinburgh; Dr. Holland; Mr. Harrild; Mr. Perkins; Mr. Maynard, Durham; Mr. Williams; Mr. Bennett, Bangor; Dr. Berry; Dr. Highmore, Sherborne; Mr. Thierry; Mr. Pitman, Aden; Mr. Sandford; Dr. Schooles, Hythe; Mr. Hodson; Mr. Cooke, Thorpe; Dr. Tripe; Mr. Bent; Mr. New, Birmingham; Mr. Burke, Peterborough; Mr. Barnes; Mr. Crews; Mr. Patrick; Dr. Dickson; Dr. Moorhead, Lurgan; Dr. Jameson; Dr. Fry; Mr. Story, South Hackney; Dr. Smith, Coxwold; Mr. Mackay, Darlington; Dr. Foster, Birmingham; Dr. Davey; Mr. Owers; Dr. Althaus; Mr. Westmoreland; Mr. Williamson; Mr. Mount; Mr. Holl; Mr. Oliver, Teignmouth; Mr. Baukes, Wellington; Dr. Reid, Pembroke; Dr. Bell, Rochester; Mr. Part, Poole; Dr. Hatchell; Mr. Buchanan; Mr. Herring; Mr. Thompson; Dr. Axford, Bridgwater; Mr. Hemming; Dr. Jones; Mr. Ellis; Mr. Danford; Dr. Sedgwick; Mr. Lowe; Mr. Byass; Dr. Chapman; Dr. Burder, Bristol; Dr. Stewart, Cape Town; Dr. Walker; Mr. Dyer; Dr. Rubidge, Port Elizabeth; Mr. Wells; Mr. Hughes, Corwen; Mr. J. P. Smith; Mr. Hayden; Mr. Bland; Mr. Hurley; Mr. F. H. Lovell; Dr. R.; A Subscriber; J. P.; Army Medical Department; Cosmopolitan; A Highland Practitioner; K. Z.; LEX; A Constant Subscriber; Enquirens; R. P.; A Scottish University Student; Delta; A Lover of the Profession; Indus; Anxious; J. B.; Sanus; D. T.; Alpha; E. P.; J. L. W.; &c. &c.

THE *Worcestershire Chronicle* and the *Midland Counties Herald* have been received.

Medical Diary of the Week.

Monday, Oct. 15.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 9 A.M. and 1½ P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M.

Tuesday, Oct. 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, Oct. 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.

Thursday, Oct. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
HARVEIAN SOCIETY OF LONDON.—8 P.M. Dr. Maudsley, "On some of the Causes of Insanity."

Friday, Oct. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.

Saturday, Oct. 20.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—7½ P.M.

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CATALAN

NOTICE OF TRADE MARK.—C. KINLOCH and CO. have, during the last four years, introduced to the British public a pure, full-bodied, fruity red Wine, of port character, called Catalan, costing 20s. per dozen including bottles, or 18s. per dozen without bottles. The said Catalan, having all the strengthening properties of port, without heat, is much recommended by Medical Men for the use of Invalids, and is in very great demand. This is to give notice, that, in order to protect the public from brandied and blended imitations, C. Kinloch & Co. will hereafter sell this wine in capsuled bottles, such capsule having the words "C. Kinloch and Co., London," and the name "Catalan" on a red cushion in the centre. No wine but that so capsuled is Kinloch's genuine Catalan. Proceedings will immediately be taken against any parties imitating the said Catalan Trade Mark in any way.

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Ready for supply: Sample Dozen Cases, each containing two bottles of six different kinds of such Wines which are highly recommended by the Medical Faculty. Prices at 24s., 30s., 36s., and 42s. per case. Carriage free. Cash on delivery.

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